

PUBLIC VERSION

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C. 20436**

In the Matter of

**CERTAIN DC-DC CONTROLLERS
AND PRODUCTS CONTAINING SAME**

**Inv. No. 337-TA-698
(Enforcement Proceeding)**

ENFORCEMENT INITIAL DETERMINATION

Administrative Law Judge David P. Shaw

This is the administrative law judge's Enforcement Initial Determination (EID) pursuant to the Commission Order of August 30, 2011. The administrative law judge, after a review of the record developed, finds *inter alia* that the enforcement respondent violated the consent order issued at the conclusion of Inv. No. 337-TA-698 on August 13, 2010.

It is also the administrative law judge's recommendation that enforcement measures are appropriate for violation of the consent order.

PUBLIC VERSION

TABLE OF CONTENTS

I.	Background	1
	A. Institution of the Enforcement Proceeding; Procedural History ...	1
	B. The Parties	4
	C. The Accused Products	6
	D. Technological Background	12
II.	Jurisdiction	14
III.	Importation	15
IV.	General Principles of Applicable Law	32
	A. Claim Construction	32
	B. Infringement	36
	C. Trade Secrets	40
V.	United States Patent No. 7,315,190	43
	A. Claim Construction	46
	B. Infringement	50
VI.	United States Patent No. 6,414,470	60
	A. Claim Construction	62

PUBLIC VERSION

B.	Infringement	66
VII.	United States Patent No. 7,132,717	73
A.	Claim Construction	75
B.	Infringement	78
VIII.	Trade Secrets	86
IX.	Remedy	109
X.	Conclusions	124
XI.	Enforcement Initial Determination and Order	124

PUBLIC VERSION

The following abbreviations may be used in this Enforcement Initial Determination:

ALJ	-	Administrative Law Judge
CDX	-	Complainants' Demonstrative Exhibit
CPX	-	Complainants' Physical Exhibit
CX	-	Complainants' Exhibit
Dep.	-	Deposition
EDIS	-	Electronic Document Imaging System
JPX	-	Joint Physical Exhibit
JX	-	Joint Exhibit
RDX	-	Respondent's Demonstrative Exhibit
RPX	-	Respondent's Physical Exhibit
RWS	-	Rebuttal Witness Statement
RX	-	Respondent's Exhibit
Tr.	-	Transcript
WS	-	Witness Statement

PUBLIC VERSION

I. Background

A. Institution of the Enforcement Proceeding; Procedural History

1. Institution of the Underlying Investigation on Violation

The enforcement proceeding is based on an original investigation instituted on January 5, 2010. 75 Fed. Reg. 446 (2010). In the original violation proceeding, complainants Richtek Technology Corp. and Richtek USA, Inc. (collectively, “complainants” or “Richtek”) accused uPI Semiconductor Corp. (“uPI”) and several downstream manufacturers, including Sapphire Technology Limited (“Sapphire”), of violating section 337 by importing, selling for importation into the United States, and/or selling in the United States after importation certain DC-DC controllers and products containing the same. Richtek’s December 3, 2009 complaint alleges that certain uPI DC-DC controllers infringed certain Richtek patents, and that the products were based on Richtek trade secrets misappropriated in violation of section 337 of the Tariff Act of 1930. Inv. No. 337-TA-698 (Violation), Complaint (Dec. 3, 2009) (amended Apr. 13 and May 20, 2010) (“Original Complaint”).

More specifically, the underlying investigation involved power management integrated circuit (“IC”) components such as direct-current-to-direct-current power controllers (“DC-DC controllers”). Original Complaint, ¶ 2. Respondent uPI was alleged to make and sell products that infringed three U.S. patents owned by Richtek: U.S. Patent No. 7,315,190 (“the ‘190 patent”) (Chen) (Jan. 1, 2008); U.S. Patent No. 6,414,470 (“the ‘470 patent”) (Liu et al.) (Jul. 2, 2002); and U.S. Patent No. 7,132,717 (“the ‘717 patent”) (Su et al.) (Nov. 7, 2006). *Id.*, ¶¶ 43, 49, 55. Richtek also accused uPI of misappropriating a total of seventeen alleged business and technical trade secrets

PUBLIC VERSION

belonging to Richtek, secrets that had been created to develop, market, and manufacture Richtek's DC-DC controllers for customers in the United States. *Id.*, ¶¶ 8, 62-72, 110-124 (Second Amended Complaint).

Richtek and uPI, among others, engaged in full discovery and filed prehearing briefs with the administrative law judge assigned to the original violation proceeding. The administrative law judge did not issue an Initial Determination, however, as each of the original respondents entered into a settlement agreement and/or consent order before the date of the scheduled evidentiary hearing. *See* Order Nos. 32, 47, 50, 56 (all nonreviewed). Accordingly, neither the Commission nor the administrative law judge made any findings of fact or conclusions of law in the violation proceeding that could have a preclusive effect in this enforcement proceeding.

uPI agreed to a unilateral consent order that was issued in August 2010. Order No. 47 (Jul. 22, 2010) (nonreviewed Aug. 13, 2010). In the consent order directed to uPI, the Commission ordered that:

A. Effective immediately upon the entry of this Consent Order, uPI will not import into the United States, sell for importation into the United States, or sell or offer for sale in the United States after importation, or knowingly aid, abet, encourage, participate in, or induce importation into the United States, the sale for importation into the United States, or the sale, offer for sale, or use in the United States after importation, without the consent or agreement of Richtek, any DC-DC controllers or products containing same which infringe claims 1-11, 26, or 27 of U.S. Patent No. 7,315,190 ("190"), claims 29 or 34 of U.S. Patent No. 6,414,470 ("470"), or claims 1-3 or 6-9 of U.S. Patent No. 7,132,717 ("717"), or which are produced using or which contain Richtek's asserted trade secrets.

JX-12 (uPI Consent Order) at 1-2. In the stipulations that led to the consent order, uPI also stated that:

PUBLIC VERSION

8. UPI signs this Stipulation for settlement purposes only and does not admit that any of Complainant's intellectual property rights have been violated, that any claim of Complainant's patents are valid or enforceable or infringed, that Richtek has asserted any valid trade secrets or that such trade secrets have been misappropriated or misused by uPI, or that any unfair act has been committed.

Order No. 47 at 4. The investigation was terminated shortly thereafter when the last remaining respondent reached a settlement with Richtek. Order 56 (Aug. 17, 2010) (nonreviewed Sept. 9, 2010); *see* 75 Fed. Reg. 56,136 (Sept. 15, 2010) (corr. notice issued Oct. 21, 2010). No party appealed the Commission's determination.

2. Institution of the Enforcement Proceeding

By publication of a notice in the *Federal Register* on September 6, 2011, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted this formal enforcement proceeding to determine:

[W]hether uPI and/or Sapphire are in violation of the August 13, 2010 consent orders issued in the investigation, and what, if any, enforcement measures are appropriate.

76 Fed. Reg. 55109 (2011).

The following entities are named as parties to the formal enforcement proceeding: Richtek, respondents uPI and Sapphire, and the Office of Unfair Import Investigations. *Id.*

Initially, the target date for completion of this enforcement proceeding was set at 12 months, *i.e.*, September 6, 2012. Order No. 58. Subsequently, the target date was

PUBLIC VERSION

extended by one month, *i.e.*, to October 6, 2012, and thus the due date for the Enforcement Initial Determination (“EID”) is June 8, 2012.¹ Order Nos. 59 and 93.

A prehearing conference was held on March 1, 2012, with the evidentiary hearing in this enforcement proceeding commencing immediately thereafter. The hearing concluded on March 6, 2012. *See* Order No. 73; Tr. 1-1109. The parties were requested to file post-hearing briefs not to exceed 120 pages in length, and to file reply briefs not to exceed 60 pages in length. Tr. 1096.

B. The Parties

Complainant Richtek Technology Corp. is a corporation organized and existing under the laws of Taiwan. It was founded in 1998, and maintains its principal place of business in Hsinchu, Taiwan. Complaint, ¶¶ 3-4 (Jul. 21, 2011). Complainant Richtek USA, Inc. is a corporation incorporated under the laws of California with its principal place of business in San Jose, California. *Id.*, ¶ 3. Richtek USA provides “engineering, research and development, testing, marketing, and design-in support to its U.S. based customers in order for them to approve and incorporate Richtek’s IC chips in their products.” *Id.*, ¶ 5. Complainants design power management IC components such as DC-DC controllers. *Id.*, ¶¶ 3-4.

Respondent uPI is a Taiwanese corporation with a principal place of business in Hsinchu, Taiwan. It was founded in December 2005, by individuals who previously were employed by Richtek Technology Corp. in Taiwan. uPI Response to Complaint, ¶ 6

¹ The target date October 6, 2012, falls on a Saturday, and October 8, 2012, is a federal holiday. Accordingly, the effective target date is October 9, 2012, which requires the Enforcement Initial Determination to be filed by Friday, June 8, 2012. *See* 19 C.F.R. § 210.51(a); 19 C.F.R. § 210.42(a)(1)(i); 19 C.F.R. § 201.14(a); Order No. 93.

PUBLIC VERSION

(Sept. 26, 2011). uPI designs, develops, markets, offers for sale, and sells power management IC chips, including DC-DC controllers. *Id.*, ¶ 7.

[

RX-235C (Chang WS) at 17-18; Chang Tr. 817.

RX-235C (Chang WS) at 18;

Chang Tr. 812-813.

] RX-235C

(Chang WS) at 18.

On February 24, 2012, the Taiwanese stock exchange released an announcement that ASUSTek (aka “ASUS”) is purchasing a controlling share of uPI, and that uPI will become a subsidiary of ASUSTek. CRX-51 (Taiwan stock exchange announcement). In exchange for approximately \$11 million, ASUSTek will control 53 percent of the shares of uPI, [*Id.*; Chang Tr. 813-814; Cox Tr. 1083. [

Chang Tr. 813.

] Huang Tr. 1026.

Sapphire Technology Ltd. (“Sapphire”) is a Hong Kong corporation with its

PUBLIC VERSION

principal place of business in Hong Kong. *See* Sapphire Response to Complaint., ¶ 9 (Sept. 26, 2011). Sapphire approves certain IC chips from uPI as qualified parts, including DC-DC controllers, and incorporates these uPI parts into Sapphire products imported, offered for sale, and sold throughout the United States. *Id.*

On February 29, 2012, Sapphire and Richtek jointly filed a motion to terminate the investigation with regard to Sapphire on the basis of a settlement agreement, which was subsequently granted. Order No. 89 (Mar. 20, 2012) (unreviewed initial determination, Apr. 11, 2012).

The Commission investigative attorney (“Staff”) represents the Office of Unfair Import Investigations.

C. The Accused Products

The uPI consent order underlying this enforcement proceeding applies to “any DC-DC controllers or products containing same which infringe claims 1-11, 26, or 27 of U.S. Patent No. 7,315,190 [], claims 29 or 34 of U.S. Patent No. 6,414,470 [], or claims 1-3 or 6-9 of U.S. Patent No. 7,132,717 [], or which are produced using or which contain Richtek’s asserted trade secrets.” JX-12 (uPI Consent Order) at 2. Richtek has identified certain specific products that, in Richtek’s view, violate the terms of uPI’s consent order because (1) they infringe one or more of the asserted patent claims and/or are produced using Richtek’s asserted trade secrets; and (2) with respect to these products, uPI continues to:

import into the United States, sell for importation into the United States, or sell or offer for sale in the United States after importation, or knowingly aid, abet, encourage, participate in, or induce importation into the United States, the sale for importation into the United States, or the sale, offer for sale, or use in the

PUBLIC VERSION

United States after importation, without the consent or agreement of the Complainant....

See Complaint, ¶¶ 17-30. These identified products can be divided into two categories:

(1) products developed before the effective date of the consent order, especially those that were specifically accused in the underlying investigation; and (2) products developed after the effective date of the consent order that did not exist at the time of the underlying investigation.

1. uPI Products Accused in the Underlying Investigation

Richtek contends that uPI's 61xx,² 62xx,³ 63xx,⁴ and 77xx⁵ families of controllers, converters, and regulators use and/or were made or derived using one or more trade secrets misappropriated from Richtek. *See* CX-9C (Foty WS) at 44-45; CDX-200C (formerly accused uPI products). Richtek also contends that certain uP61xx chips infringe the asserted '190 patent; certain uP62xx chips infringe the '470 patent; and certain uP61xx and uP63xx chips infringe the '717 patent. CX-15C-B (Horenstein

² The 61xx family includes the following products: uP6101, uP6103, uP6106, uP6107, uP6108, uP6109, uP6110, uP6111, uP6112, uP6113, uP6115, uP6119, uP6120, uP6121, uP6124, uP6125, uP6127, uP6128, uP6131, uP6161, uP6162, uP6163, uP6182, uP6184. *See* CX-9C (Foty WS) at 7-8; CDX-200C.

³ The 62xx family includes: uP6201, uP6202, uP6203, uP6204, uP6205, uP6206, uP6207, uP6208, uP6209, uP6210, uP6212, uP6213, uP6214, uP6215, uP6216, uP6217, uP6218, uP6219, uP6281, uP6282, uP9201, ASP0902, ASP0903, ASP0906, ASP0905, ASP0907, ASP0908. *See* CX-9C (Foty WS) at 7-8; CDX-200C.

⁴ The 63xx family includes: uP6301, uP6302, uP6303, uP6304, uP6305, uP6306, uP6307, uP6308, uP6309, uP6310, uP6311, uP6381, uP6382, BC6305, BC6308, AR6310, BC6310, BC6381, RA6381, AR6381, AR6382, BC6382. *See* CX-9C (Foty WS) at 7-8; CDX-200C.

⁵ The 77xx family includes: uP7701, uP7703, uP7704, uP7705, uP7706, uP7707, uP7708, uP7709, uP7710, uP7711, uP7712, uP7713, uP7714, uP7716, uP7717, uP7718, uP7719, uP7720, uP7721, uP7723, uP7724. *See* CX-9C (Foty WS) at 7-8; CDX-200C.

PUBLIC VERSION

Corrected WS) at 26, 38-39, 49, 213; CX-13C-B (Blanchard Corrected WS) at 21-24.

All four of the above product families were identified as accused products in the underlying investigation.

The DC-DC controllers are sold to manufacturers of video graphics cards, motherboards, and products such as evaluation boards or testing boards. The manufacturers incorporate uPI's chips into their products, and may then export such downstream products to the United States. Shortly before filing the Complaint, Richtek obtained graphics cards and motherboards in the United States that contained the following uPI chips from the "formerly accused" uPI product families:

Formerly Accused uPI Products Alleged to Have Entered the United States After the Effective Date of the uPI Consent Order

Family	Description	Products in U.S.	Asserted Intellectual Property Right			
			Trade Secrets	'190	'470	'717
61xx	Synchronous Rectified Buck Controllers	uP6101, uP6161	X	X		X
62xx	Dual-Phase or Multi-Phase Synchronous-Rectified Buck Controllers	uP6203, uP6213, uP6218, uP6219	X		X	
63xx	Synchronous Rectified Buck Converters	uP6305	X			X
77xx	Low Dropout Linear Regulators	uP7701, uP7704, uP7706, uP7711	X			

Compls. Br. at 7-8; Staff Br. at 10; Complaint, ¶ 66 & Ex. 28; CDX-200C; CDX-801C; CDX-802C. Richtek contends that the presence of these downstream products in the

PUBLIC VERSION

United States, each containing accused uPI chips manufactured after August 13, 2010 (*see* Complaint Ex. 28), is evidence that uPI has continued to engage in activities prohibited by the consent order.

2. Products Developed After Entry of the Consent Order

Richtek contends that every new product family of controllers, converters, and regulators that uPI has developed since August 13, 2010 continues to use, and is derived from, one or more misappropriated Richtek trade secret.⁶ Thus, Richtek argues, importation of any downstream product incorporating a new uPI chip is a violation of the uPI consent order. Compls. Br. at 8; *see* CX-9C (Foty WS) at 44-45, 171. Richtek also argues that certain newly developed uP16xx products infringe the asserted '470 patent, and that the uP7901 product infringes the '717 patent.⁷ *See* CX-15C-B (Horenstein Corrected WS) at 219, 238, 277, 290-91; CX-13C-B (Blanchard Corrected WS) at 21-24.

⁶ Richtek accuses the following newly developed uPI products: uP0102, uP0103, uP0104, uP0105, uP0106, uP0107, uP0108, uP0109, uP0110, uP0111, uP0112, uP0113, uP0116, uP0117; uP1501, uP1503, uP1504, uP1508, uP1509, uP1510, uP1511, uP1514, uP1519, uP1525, uP1526, uP1527, uP1529; uP1561, uP1563; uP1601, uP1604, uP1606, uP1607, uP1608, uP1609, uP1610, uP1612, uP1618, uP1625, uP1631, uP1632, uP1633; uP1703, uP1704, uP1705, uP1706, uP1707, uP1712, uP1713; uP1781, uP1782, uP1783; uP1981; uP3871; uP6002A, uP6002B, uP6004; uP6122, uP6126, uP6129, uP6130, uP6133, uP6137; uP6220, uP6223, uP6225, uP6228, uP6230, uP6234, uP6235; uP6615; uP7901. *See* CX-9C (Foty WS) at 12; CDX-201C.

⁷ There appears to be no evidence that either the uP1604 or the uP7901 controllers have ever been imported into the United States.

PUBLIC VERSION

**Newly Developed uPI Products: Products Alleged to Have Entered
the United States in Violation of the uPI Consent Order**

Family	Description	Products in U.S.	Asserted Property Right			
			Trade Secrets	'190 Patent	'470 Patent	'717 Patent
uP01xx	Single Output LDO	uP0104, uP0105	X			
uP15xx	Single Buck Controllers		X			
	Single Buck Controllers w/ LD		X			
uP16xx	Multiple Output Buck Controller		X		X	
uP17xx	Simple Single Buck Converter		X			
	Multiple Output Buck Converter		X			
uP19xx	Multiple Output Buck Controller		X			
uP38xx	Single Buck Controllers		X			
uP60xx	Boost Converter		X			
uP61xx	Single Buck Controllers	uP6122	X			
uP62xx	Multiple Output Buck Controller		X			
uP66xx	PMIC		X			
uP79xx	Multiple Output LDO		X			X

Compls. Br. at 8; Staff Br. at 11; CX-9C (Foty WS) at 44-45.

Like uPI's older products, these new product families consist of DC-DC controllers used in downstream products such as video graphics cards, motherboards, and evaluation boards. After the date of the uPI consent order, Richtek obtained motherboards and a VGA card in the United States that contained uPI chips from the newly developed product families. Complaint, ¶ 66 & Exs. 24-25, 29; CX-9C (Foty WS) at 23-26.

3. Downstream Products

As noted above, DC-DC controllers typically enter the United States in downstream products such as video graphics (“VGA”) cards, motherboards, and evaluation boards.⁸ The evidence demonstrates that uPI’s DC-DC controllers are incorporated into VGA cards and motherboards [

].

Compls. Br. at 9-11; Staff Br. at 12; CDX-133C []; CDX-135C []; CDX-137C []; CDX-139C []; CDX-141C []; CX-2356C (Cox 1st Supp. WS) []; CX-2371C (Cox 2nd. Supp. WS) [].

Before filing its enforcement complaint, Richtek purchased in the United States a number of downstream products containing uPI DC-DC controllers that were accused products in the original investigation. *See, e.g.*, CDX-208C (downstream products containing uP6101, uP6161, uP6203, uP6219, and uP7704 chips); CPX-16 [] motherboard), CPX-35 [] VGA card), CPX-37 [] VGA card), CPX-40 [] motherboard), CPX-42 [] VGA card), CPX-45 [] VGA card), CPX-52 [] motherboard). Richtek also purchased in the United States certain downstream products

⁸ Evaluation boards are testing circuit boards that uPI manufactures and then sells to customers so that the customers can examine uPI’s products and test them to confirm that they meet the customer’s operating criteria. Richtek alleges, [] that uPI has sold and shipped evaluation boards containing its DC-DC controllers to U.S. customers. Complaint, ¶ 8; CX-9C (Foty WS) at 46-47; CDX-207C; CX-5C (Cox WS) at 44; CDX-131C [

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PUBLIC VERSION

that contained newly developed uPI DC-DC controllers: MSI motherboards containing uP0104 and uP0105 controllers, and an HIS VGA card containing a uP6122 controller. Complaint, ¶ 68 & Exs. 29, 34-35, 75-76. Finally, documents received from third-party downstream manufacturers in response to subpoenas indicate that these third parties have continued to manufacture, import into the United States, and/or sell in the United States after importation various downstream products incorporating uPI DC-DC controllers. *See* CX-1644 to CX-1647, CX-1649 to CX-1651C (declarations re document production in response to subpoenas); CDX-133C []; CDX-135C []; CDX-137C []; CDX-139C []; CDX-141C []; CX-2356C (Cox 1st Supp. WS) []; CX-2371C (Cox 2nd. Supp. WS) [].

D. Technological Background

The products at issue in this enforcement proceeding are DC-DC controllers and the downstream products that contain them. DC-DC controllers are integrated circuits that handle power management functions, specifically the conversion of one direct current voltage into another. CX-9C (Foty WS) at 42. Most electronic appliances include some sort of power regulation in their circuitry. RX-239C (Gwozdz WS) at 6. An IC is a single device containing many transistors and fabricated as a combined unit. *Id.* at 5. A DC-DC controller IC is typically sealed inside a plastic package and electrically connected to the outside world by metal pins that extend from the package. This arrangement allows manufacturers to install pre-packaged DC-DC controllers onto printed circuit boards (“PCBs”) by connecting the metal pins on the controller to other electronic components on that board. CX-9C (Foty WS) at 42. If two controllers have the same arrangement of metal pins, with each pin assigned to the same function, the

PUBLIC VERSION

controllers are said to be “pin-to-pin compatible,” meaning that the controllers can be used interchangeably on a PCB. *See Id.* at 65-66.

uPI and Richtek are both design companies that create and market integrated circuit chip product designs, but do not own their own manufacturing plants, or “fabs,” to make actual integrated circuit chips from their designs. Such enterprises are known as “fabless” design companies. The enterprises that develop and manufacture IC chips from a fabless company’s design are referred to as “fabs” and “foundries.” *See Id.* at 2.

A full-custom fabless semiconductor company such as uPI or Richtek chooses a foundry to partner with and then engineers its designs to comply with the foundry’s manufacturing specifications. *Id.* Each foundry has its own requirements based, among other considerations, on the limitations of its manufacturing equipment. *See* RX-242C (Min WS) at 54-55. Custom IC designs are also influenced by the electronic design automation (“EDA”) software used to design integrated circuit chips. EDA tools allow a design engineer to create a “schematic,” a graphical representation of the different components and their connections in an IC, using a symbol library representing the circuits to be used in the IC. A symbol library contains pre-designed versions of frequently-used transistors, logic circuits, and other common components that an engineer can paste into a circuit design rather than recreating each transistor from scratch. *See Id.* at 7, 77-79. A fabless design, therefore, is a product of a specific foundry’s specifications and the tools available in the design software, as well as the designer’s creativity and original input.

DC-DC controllers are typically sold through distributors to original equipment manufacturers (“OEMs”) that install the chips in PCBs before entry into the United

PUBLIC VERSION

States. In addition, the PCBs themselves may be installed in a larger product, such as a laptop or telephone, before entering the United States. DC-DC controllers that enter the United States directly may be samples intended for testing and evaluation purposes. *See* CX-5C (Cox WS) at 44; CDX-131C (uPI direct shipments). They may be installed on an “evaluation board” before shipping to the United States. *See* Complaint, ¶ 8; CDX-207C.

II. Jurisdiction

Richtek, uPI, and the Staff have appeared and presented evidence and arguments on the merits in this proceeding. No party has contested the Commission’s jurisdiction over it. *See, e.g.,* Ground Rule 12 Filing. Accordingly, it is found that the Commission has personal jurisdiction over all parties in this proceeding.

No party has contested the Commission’s *in rem* jurisdiction over the accused products. *See, e.g., Id.* Indeed, as indicated below, the importation requirement has been satisfied with respect to the accused products. Accordingly, it is found that the Commission has *in rem* jurisdiction over the accused products.

No party has contested the Commission’s jurisdiction over the subject matter of this proceeding. *See, e.g., Id.* Indeed, as indicated in the Commission’s notice, discussed above, this enforcement proceeding involves the importation of products alleged to infringe United States patents, and which allegedly were produced using or which contain Richtek’s asserted trade secrets, in a manner that violates section 337 of the Tariff Act, as amended. Based on those facts alone, it may be found that the Commission has subject matter jurisdiction over this proceeding.

PUBLIC VERSION

Accordingly, it is found that along with personal jurisdiction over the parties and *in rem* jurisdiction over the accused products, the Commission also has subject matter jurisdiction over this proceeding.

III. Importation

A. Unlawful Importation

uPI has acknowledged that [

]

uPI's Manager of Strategic Marketing, Doris Ko, has testified that [

]

RX-237C (Ko WS) at 7; RX-68C. She further explained that [

] *Id.* Ms. Ko testified that [

] *Id.* at 7-8; *see*

CDX-131C (summary of uPI direct sales).

These shipments alone are sufficient to meet the importation requirement of section 337. *See* 19 U.S.C. § 1337(a); *Certain Trolley Wheel Assemblies*, 337-TA-161, Comm'n Op. at 7-8, USITC Pub. 1605 (Nov. 1984) (importation requirement satisfied by importation of single product of no commercial value); *Certain Purple Protective Gloves*, Inv. No. 337-TA-500, Order No. 17, at 5 (Sept. 23, 2004) (unreviewed Initial Determination) ("A complainant need only prove importation of a single accused product to satisfy the importation element.").

PUBLIC VERSION

Downstream products manufactured by non-respondent third parties and incorporating uPI's "formerly accused" DC-DC controllers have also continued to enter the United States. *See, e.g.*, CDX-133C []; CDX-135C []; CDX-137C []; CDX-139C []; CDX-141C []; CX-2356C []; CX-2371C (Cox 2nd Supp. WS) []. These importations include products alleged to infringe each of the asserted patents. *See, e.g.*, CX-852C to CX-854C [] showing sales after importation of products containing uP61xx chips (alleged to infringe the '190 and '717 patents), uP62xx chips (alleged to infringe the '470 patent), and uP77xx chips (alleged to infringe the '717 patent)). As discussed below, however, many of these downstream products were covered by agreements between Richtek and the seller, and thus were sold in the United States with Richtek's consent. Any efforts that uPI made to "aid, abet, encourage, participate in, or induce" such agreed-upon downstream activity would not constitute indirect infringement, and thus would not be a violation of the uPI consent order. JX-12 (uPI consent order).

B. Downstream Importation with Richtek's Consent

The uPI consent order prohibits importation of products that infringe upon Richtek's intellectual property rights "without the consent or agreement of Richtek[.]" JX-12 (uPI consent order) at 3. uPI argues that if any of its formerly accused DC-DC controllers entered the United States as part of a downstream product after the consent order took effect, it was pursuant to agreements negotiated between Richtek and [

] and therefore importation was done with Richtek's consent.

Resp. Br. at 26-36. Many, though not all, of the importations of formerly accused

PUBLIC VERSION

products that Richtek has identified are covered by one of these [] agreements.

Therefore, it was not a violation of the consent order for uPI to “aid and abet” such activity by continuing to supply foreign distributors with DC-DC controllers identified in a Richtek agreement with a downstream manufacturer.

[

] RX-167C

[]; RX-168C to RX-169C []; RX-170C []; RX-172C [].

[

] *See, e.g.,* CX-4C (Timm WS) at 13-14. However, these agreements should be understood according to the plain written language of the contract

⁹ In this enforcement proceeding, Richtek has not alleged that uPI’s DC-DC controllers entered the United States through [] after August 13, 2010.

PUBLIC VERSION

terms, and not by Richtek's *post hoc* interpretation. *See, e.g.*, Restatement (First) of Contracts § 237 (1932) (“[T]he integration of an agreement makes inoperative to add to or to vary the agreement all contemporaneous oral agreements relating to the same subject-matter[.]”).

Richtek asserts that California law governs the interpretation of these [] agreements pursuant to their choice-of-law provisions, that under California law extrinsic evidence of a contract's meaning is admissible, and that extrinsic evidence in the form of the testimony of Richtek employee David Timm demonstrates that the agreements were limited to []. Compls. Reply Br. at 21-23. In California, parol evidence is admissible to interpret a contract if “relevant to prove a meaning to which the language of the instrument is reasonably susceptible.” *Hervey v. Mercury Cas. Co.*, 110 Cal. Rptr. 3d 890, 895 (Cal. Ct. App. 2010) (quoting *Garcia v. Truck Ins. Exchange* 36 Cal.3d 426, 435 (Cal. 1984)); *Pacific Gas & Elec. Co. v. G. W. Thomas Drayage & Rigging Co.*, 442 P.2d 641, 644 (Cal. 1968).

In California, the determination whether to admit parol evidence regarding a contract involves a two-step process:

First, the court provisionally receives (without actually admitting) all credible evidence concerning the parties' intentions to determine “ambiguity,” *i.e.*, whether the language is “reasonably susceptible” to the interpretation urged by the party. If in light of the extrinsic evidence the court decides the language is “reasonably susceptible” to the interpretation urged, the extrinsic evidence is then admitted to aid the second step—interpreting the contract.

Supervalu, Inc. v. Wexford Underwriting Managers, Inc., 96 Cal. Rptr. 3d 316, 323 (Cal. Ct. App. 2009) (quoting *General Motors Corp. v. Superior Ct.*, 15 Cal. Rptr. 2d 622, 626

PUBLIC VERSION

(Cal. Ct. App. 1993)); see *Hervey*, 110 Cal.Rptr.3d at 895. The second step, using extrinsic evidence to interpret a written document, is explained as follows: “[P]arol evidence is properly admitted to construe a written instrument when its language is ambiguous.” *Hervey*, 110 Cal.Rptr.3d at 895 (quoting *Winet v. Price*, 6 Cal. Rptr. 2d 554 (1992)). It is not admissible if it contradicts a clear and explicit provision in the contract. *Supervalu*, 96 Cal.Rptr.3d at 323; *Pacific Gas*, 442 P.2d at 645 (“extrinsic evidence is not admissible to add to, detract from, or vary the terms of a written contract”). Thus, if even extrinsic evidence cannot render a contract provision as somehow ambiguous, then the plain meaning of that provision governs. This is consistent with Commission practice. See, e.g., *Certain Plastic Encapsulated Integrated Circuits*, Inv. No. 337-TA-315, 1992 WL 813959, USITC Pub. No. 2574, Comm’n Notice (Nov. 1992) (“A contract is unambiguous when it is reasonably open to just one interpretation given the rules of construction and the surrounding circumstances.”).

Even under California law, Richtek has failed to prove that its [] agreements with [] are ambiguous, or that [] should be read into the documents. If the negotiating parties had wanted to limit [] they could have included language similar to that in the [] agreement, which expressly provides that [] will not [] Mot. Docket No. 698-154 Ex. A at 1. The parties did not include such a provision, and Richtek has not presented any credible evidence to suggest that they meant to do so but inadvertently omitted it from all three agreements. Inasmuch

PUBLIC VERSION

as the extrinsic evidence of Mr. Timm's testimony does not establish that any of the written agreements is ambiguous, all three agreements should be interpreted as written.

1. The [] Agreement

The [] agreement between Richtek and [] provides that [

10

[11]

]

¹⁰ [

RX-167C, ¶ 1(iii).

¹¹ [

] RX-167C, ¶ 1(i).

PUBLIC VERSION

RX-167C, ¶¶ 2-3 [

] Further, Richtek and

[] agree that [

12

]

Id., ¶ 8 (emphases added).

Thus, [] are authorized to continue to sell circuit boards
containing “formerly accused” uPI DC-DC controllers [

]

[

] RX-167C, ¶ 1(iii). [

¹² [

] RX-167C, ¶ 1(ii).

PUBLIC VERSION

]

[

] It is not a violation of an intellectual property right to assist another in an activity that does not itself infringe that right. *See, e.g., RF Delaware, Inc. v. Pacific Keystone Techs, Inc.*, 326 F.3d 1255, 1268 (Fed. Cir. 2003) (for indirect infringement to exist, there must also be at least one act of direct infringement by some entity); *Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 876 n.4 (Fed. Cir. 1995) (“Absent direct infringement of the claims of a patent, there can be neither contributory infringement or inducement of infringement.”). Direct or indirect sales by uPI to [

] do not aid unlawful importations or sales of infringing goods, and therefore cannot be violations of the uPI consent order.

2. The [] Agreement

Richtek’s [] agreement with [

PUBLIC VERSION

] RX-168C, ¶¶ 1-2 [

] RX-168C, ¶ 1(2). [

] *See* RX-139C [

]

each of which Richtek has identified as sellers of downstream products containing
accused uPI controllers. *See* Complaint Ex. 27.

[

]

Id., ¶ 2. [

] RX-169C at 1 [

]

Thus, [] were authorized to continue to sell circuit boards
containing “formerly accused” uPI DC-DC controllers, [

] *See* RX-168C, ¶ 1(4). [

13

]

3. The [] Agreement

Richtek has also entered into a separate agreement with [

] RX-172C [

] *Id.*,

¶ 1(1). [

¹³ [

] *See* RX-168C, []

PUBLIC VERSION

] *Id.*, ¶ 1(4). [

]

[

] Accordingly, sales from uPI to [] whether direct or through distributors, of DC-DC controllers [

] do not aid or abet unlawful importations of infringing goods, and therefore cannot violate the uPI consent order.

C. Downstream Importation Not Authorized by a [] Agreement

While many of the downstream product sales that Richtek has identified fall within the terms of one or more of the [] agreements discussed above, there is also evidence of downstream importations not covered by any such agreement. *See* CX-5C (Cox WS) at 38-39 [] 27-32 [] 32-36 [] 37-38 [] and 36-37 []. The evidence, however, indicates that the number of violations is smaller than Richtek has asserted.

[

] RX-1518C (Prowse WS) at 61. [

PUBLIC VERSION

]
Id. at 61-62 []

see CDX-141C [

] CDX-141C at 5-6.

[

] RX-167C []

RX-168C [

] *See* CDX-133C []; RX-244C

(Slemmer WS) at 5. The evidence shows that there was some importation of []
products containing uPI chips in apparent violation of the consent order. Specifically,
uPI's expert, Mr. William Slemmer, testified that [

] RX-244C (Slemmer WS) at 17; RDX-250C [

] Inasmuch as [] did not provide specific
sale dates in response to the subpoena, it is not possible to determine an actual number of
days in violation of the consent order due to [] product sales. Richtek argues that
[] products were imported on an estimated fourteen days following entry of the uPI

PUBLIC VERSION

consent order, while uPI favors a ten-day estimate. RX-1518C (Prowse WS) at 99. The undersigned agrees with uPI's estimate of []¹⁴

[] RX-167C; RX-168C; RX-139C. The evidence shows importation of some [] products containing unauthorized uPI chips, but without sufficient specificity to assess a penalty. []

[] RX-244C (Slemmer WS) at 5; *see also* CDX-135C [] Of these, Mr. Slemmer testified that []

[] RX-244C (Slemmer WS) at 17-18; RDX-251C []

[] CDX-135C; RDX-251C. The record evidence is insufficient to establish the actual number of days in violation of the consent order due to sales of []

¹⁴ The difference between the two estimates is due to a difference in assumed "lag time," or the minimum amount of time it would take a product manufactured on the date of the consent order to appear in a downstream product in the United States. The undersigned agrees with uPI that the appropriate time period is [] for the reasons discussed in the Remedy section, *infra*.

PUBLIC VERSION

[
] RX-1518C (Prowse WS) at 69;
see CX-840C to -841C [] CDX-139C [] RX-180C
[] He testified that he excluded all []

]
RX-1518C (Prowse WS) at 69; RDX-303C at 2-8 []

] ¹⁵ *Compare* CDX-139C []
] *with* RDX-303C at 2-8 []

] CDX-139C at 1-3.

With regard to [] which was not named as a respondent in the original
investigation, there is no [] agreement with Richtek. Thus, none of the []

¹⁵ []
See CDX-139C at 1-3.]

PUBLIC VERSION

sales that Dr. Cox has identified should be excluded from consideration on the basis that they were authorized by Richtek. *See* CDX-137C (summary of [] sales); CX-5C (Cox WS) at 36-37. However, they should be excluded on the grounds that Richtek has not shown that the [] sales contained uPI accused products that were sold after the date of the consent order. Richtek contends that [] imported infringing products on at least [] for an estimated total of seven days. CX-5C (Cox WS) at 50. uPI's position, [] is that there were zero days in violation in 2010-2011. *See* RX-1518C (Prowse WS) at 51; RX-1380C (e-mail from []; RX-237C (Ko WS) at 9-10. The evidence supports uPI's position.¹⁶

With regard to [

] RX-167C [

] In response to a subpoena, [

] CX-2349 ([] see

¹⁶ uPI argues that [] parts supplier, [] had such a large inventory of uPI accused controllers in August 2010 that it is reasonable to assume that [] products sold in 2010-2011 would have contained uPI parts drawn from that inventory rather than purchased from uPI after the date of the uPI consent order. RX-1380C (e-mail from [

] RX-1518C (Prowse WS) at 51. In light of this rebuttal evidence, Richtek has not met its burden of proof that uPI aided and abetted [] sale of products containing accused uPI chips by selling additional chips to [] for use in the United States after the date of the consent order. Not only did [] have a significant existing inventory of uPI controllers, but [

] RX-167C at 13-15 [

]

PUBLIC VERSION

CX-2356C (Cox 1st Supp. WS) at Q. 1. [

] *Compare* CX-2349 [

] *with* RX-167C at RTK01102565 to RTK01102567 [

] Accordingly, [] sales

resulted in zero days in violation in 2010-2011.

With regard to [

] RX-167C [

] CX-2374C

[] *see* CX-2371C

[

] CX-2374C

[

] [

]

CX-2374C [] *with* RX-167C

] [

]

PUBLIC VERSION

[] Accordingly, [] sales resulted in zero days in violation in 2010-2011.

D. Downstream Importation of Newly Developed uPI Products

Richtek has obtained motherboards and a VGA card in the United States that contained uPI chips from the newly developed uP01xx and uP16xx product families. Complaint, ¶ 66 & Exs. 24-25, 29. For example, Richtek has demonstrated that after the date of the uPI consent order, [

] See CDX-141C []

Downstream Customer	uPI Products Used in Downstream Products	Data Source
[]	[]	CDX-141C

Richtek argues that these imported products contain uPI DC-DC controllers derived from misappropriated Richtek trade secrets. CX-9C (Foty WS) at 171-97. If so, then each importation, sale for importation, or sale after importation of uPI chips from the newly developed uP01xx or uP16xx product families after August 13, 2010 would constitute a violation of the uPI consent order.

Richtek also argues that certain uP16xx chips infringe the asserted ‘470 patent and that certain uP79xx chips infringe the ‘717 patent.¹⁷ See CX-15C-B (Horenstein Corrected WS) at 219, 238, 277, 290-91; CX-13C-B (Blanchard Corrected WS) at 21-24.

¹⁷ Richtek has not asserted that any of the newly developed uPI products infringes the ‘190 patent. See CX-15C-B (Horenstein Corrected WS).

IV. General Principles of Applicable Law

A. Claim Construction

Claim construction begins with the plain language of the claim.¹⁸ Claims should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art, viewing the claim terms in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).¹⁹

In some instances, claim terms do not have particular meaning in a field of art, and claim construction involves little more than the application of the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. “In such circumstances, general purpose dictionaries may be helpful.” *Id.*

In many cases, claim terms have a specialized meaning and it is necessary to determine what a person of skill in the art would have understood the disputed claim language to mean. “Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to ‘those sources available to the public that show what a person of skill in the art would have understood disputed claim language to

¹⁸ Only those claim terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Vanderlande Indus. Nederland BV v. Int’l Trade Comm.*, 366 F.3d 1311, 1323 (Fed. Cir. 2004); *Vivid Tech., Inc. v. American Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

¹⁹ Factors that may be considered when determining the level of ordinary skill in the art include: “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 1043 (1984).

PUBLIC VERSION

mean.”” *Id.* (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). The public sources identified by in *Phillips* include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

In cases in which the meaning of a claim term is uncertain, the specification usually is the best guide to the meaning of the term. *Id.* at 1315. As a general rule, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996). However, the specification is always highly relevant to the claim construction analysis, and is usually dispositive. *Id.* Moreover, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316.

Claims are not necessarily, and are not usually, limited in scope to the preferred embodiment. *RF Delaware, Inc. v. Pacific Keystone Techs., Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003); *Decisioning.com, Inc. v. Federated Dep’t Stores, Inc.*, 527 F.3d 1300, 1314 (Fed. Cir. 2008) (“[The] description of a preferred embodiment, in the absence of a clear intention to limit claim scope, is an insufficient basis on which to narrow the claims.”). Nevertheless, claim constructions that exclude the preferred embodiment are “rarely, if ever, correct and require highly persuasive evidentiary support.” *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). Such a conclusion can be mandated in rare instances by clear intrinsic evidence, such as unambiguous claim

PUBLIC VERSION

language or a clear disclaimer by the patentees during patent prosecution. *Elekta Instrument v. O.U.R. Sci. Int'l*, 214 F.3d 1302, 1308 (Fed. Cir. 2000); *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319 (Fed. Cir. 2002).

If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, and includes inventor testimony, expert testimony, and learned treatises. *Phillips*, 415 F.3d at 1317. Inventor testimony can be useful to shed light on the relevant art. In evaluating expert testimony, a court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent. *Id.* at 1318. Extrinsic evidence may be considered if a court deems it helpful in determining the true meaning of language used in the patent claims. *Id.*

This investigation is alleged to involve means-plus-function claim limitations. When a claim uses the term “means” to describe a limitation, a presumption arises that the inventor used the term to invoke the means-plus-function format authorized by 35 U.S.C. § 112, ¶ 6.²⁰ *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir.

²⁰ The relevant portion of section 112 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6.

PUBLIC VERSION

2003). “This presumption can be rebutted when the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Id.*

Once a court concludes that a claim limitation is a means-plus-function limitation, two steps of claim construction remain: (1) the court must first identify the function of the limitation; and (2) the court must then look to the specification and identify the corresponding structure for that function. *Biomedino LLC v. Waters Technologies Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). If there is no structure in the specification corresponding to the means-plus-function limitation, the claim will be found invalid as indefinite. *Id.*

While the specification must contain structure linked to claimed means, “[a]ll one needs to do in order to obtain the benefit of [§ 112, ¶ 6] is to recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement of [§ 112,] ¶ 2.” *Id.* (citing *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999)). Additionally, interpretation of what is disclosed in the specification must be made in light of the knowledge of one skilled in the art. *Atmel*, 198 F.3d at 1380.

Thus, under section 112, the corresponding structure of the limitation “must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation. Otherwise, one does not know what the claim means.” *Id.* at 1382. Yet, “the testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification.” *Id.* (quoting *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005)).

PUBLIC VERSION

“A means-plus-function claim encompasses all structure in the specification corresponding to that element and equivalent structures.” The statute does not, however, permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim. Nor does the statute permit incorporation of structure from the written description beyond that necessary to perform the claimed function.

Micro Chem. Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250, 1258 (Fed. Cir. 1999).

B. Infringement

1. Direct Infringement

Under 35 U.S.C. §271(a), direct infringement consists of making, using, offering to sell, or selling a patented invention without consent of the patent owner. The complainant in a section 337 investigation bears the burden of proving infringement of the asserted patent claims by a “preponderance of the evidence.” *Enercon GmbH v. Int’l Trade Comm’n*, 151 F.3d 1376 (Fed. Cir. 1998); *Certain Flooring Products*, Inv. No. 337-TA-443, Comm’n Notice of Final Determination of No Violation of section 337, 2002 WL 448690 at *59, (Mar. 22, 2002).

Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, i.e., when the properly construed claim reads on the accused device exactly.²¹ *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

²¹ Each patent claim element or limitation is considered material and essential. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). If an accused device lacks a limitation of an independent claim, the device cannot infringe a dependent claim. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989).

PUBLIC VERSION

If the accused product does not literally infringe the patent claim, infringement might be found under the doctrine of equivalents. “Under this doctrine, a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.”

Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 21 (1997) (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950)). “The determination of equivalence should be applied as an objective inquiry on an element-by-element basis.”²² *Id.* at 40.

“An element in the accused product is equivalent to a claim limitation if the differences between the two are insubstantial. The analysis focuses on whether the element in the accused device ‘performs substantially the same function in substantially the same way to obtain the same result’ as the claim limitation.” *AquaTex Indus. v. Techniche Solutions*, 419 F.3d 1374, 1382 (Fed. Cir. 2005) (quoting *Graver Tank*, 339 U.S. at 608); accord *Absolute Software*, 659 F.3d at 1139-40.²³

Prosecution history estoppel can prevent a patentee from relying on the doctrine of equivalents when the patentee relinquishes subject matter during the prosecution of the

²² “Infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1130 (Fed. Cir. 2011).

²³ “The known interchangeability of substitutes for an element of a patent is one of the express objective factors noted by *Graver Tank* as bearing upon whether the accused device is substantially the same as the patented invention. Independent experimentation by the alleged infringer would not always reflect upon the objective question whether a person skilled in the art would have known of the interchangeability between two elements, but in many cases it would likely be probative of such knowledge.” *Warner-Jenkinson*, 520 U.S. at 36.

PUBLIC VERSION

patent, either by amendment or argument. *AquaTex*, 419 F.3d at 1382. In particular, “[t]he doctrine of prosecution history estoppel limits the doctrine of equivalents when an applicant makes a narrowing amendment for purposes of patentability, or clearly and unmistakably surrenders subject matter by arguments made to an examiner.” *Id.* (quoting *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1344 (Fed. Cir. 2005)).

2. Indirect Infringement

a. Induced Infringement

Section 271(b) of the Patent Act provides: “Whoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C. § 271(b).

“To prevail on a claim of induced infringement, in addition to inducement by the defendant, the patentee must also show that the asserted patent was directly infringed.” *Epcon Gas Sys. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1033 (Fed. Cir. 2002). Further, “[s]ection 271(b) covers active inducement of infringement, which typically includes acts that intentionally cause, urge, encourage, or aid another to directly infringe a patent.” *Arris Group v. British Telecomm. PLC*, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011). The Supreme Court recently held that “induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement.” *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S.Ct. 2060, 2068 (May 31, 2011). The Court further held: “[g]iven the long history of willful blindness²⁴] and its wide acceptance in the

²⁴ “While the Courts of Appeals articulate the doctrine of willful blindness in slightly different ways, all appear to agree on two basic requirements: (1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact. We think these requirements give willful blindness an appropriately limited scope that surpasses recklessness and negligence.” *Global-Tech*, 131 S.Ct. 2070-71.

PUBLIC VERSION

Federal Judiciary, we can see no reason why the doctrine should not apply in civil lawsuits for induced patent infringement under 35 U.S.C. § 271(b).” 131 S.Ct. at 2060 (footnote omitted).

b. Contributory Infringement

Section 271(c) of the Patent Act provides: “Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer. 35 U.S.C. § 271(c).

Section 271(c) “covers both contributory infringement of system claims and method claims.”²⁵ *Arris*, 639 F.3d at 1376 (footnotes omitted). To hold a component supplier liable for contributory infringement, a patent holder must show, *inter alia*, that (a) the supplier’s product was used to commit acts of direct infringement; (b) the product’s use constituted a material part of the invention; (c) the supplier knew its product was especially made or especially adapted for use in an infringement” of the patent; and (d) the product is not a staple article or commodity of commerce suitable for substantial noninfringing use. *Id.*

²⁵ “Claims which recite a ‘system,’ ‘apparatus,’ ‘combination,’ or the like are all analytically similar in the sense that their claim limitations include elements rather than method steps. All such claims can be contributorily infringed by a component supplier.” *Arris*, 639 F.3d at 1376 n.8.

PUBLIC VERSION

C. Trade Secrets

1. Choice of Law

The Federal Circuit recently confirmed that “section 337 applies to imported goods produced through the exploitation of trade secrets in which the act of misappropriation occurs abroad.” *TianRui Group Co. v. International Trade Comm’n*, 661 F.3d 1322, 1328 (Fed. Cir. 2011). Additionally, trade secret allegations such as those asserted by Richtek are governed by federal common law as articulated by the Court of Appeals for the Federal Circuit. *Id.* at 1327. Acknowledging that the question was a matter of first impression for the court, the Federal Circuit held that “a single federal standard, rather than the law of a particular state, should determine what constitutes a misappropriation of trade secrets sufficient to establish an ‘unfair method of competition’ under section 337.” *Id.* While trade secret misappropriation is ordinarily a matter of state law, *see Leggett & Platt, Inc. v. Hickory Springs Mfg. Co.*, 285 F.3d 1353, 1360 (Fed. Cir. 2002), the court reasoned that “where the question is whether particular conduct constitutes ‘unfair methods of competition’ and ‘unfair acts’ in importation, in violation of section 337, the issue is one of federal law and should be decided under a uniform federal standard, rather than by reference to a particular state’s tort law.”²⁶

TianRui, 661 F.3d at 1327; *cf. Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041,

²⁶ The Federal Circuit noted that the unfair competition provision of section 337, which governs Richtek’s trade secret claims, “falls comfortably into both of the categories that have been described as calling for the application of federal common law – instances in which ‘a federal rule of decision is necessary to protect uniquely federal interests, . . . and those in which Congress has given the courts the power to develop substantive law.’” *TianRui*, 661 F.3d at 1327 (citing *Texas Indus., Inc. v. Radcliff Materials, Inc.*, 451 U.S. 630, 640 (1981); *Textile Workers Union v. Lincoln Mills*, 353 U.S. 448, 456-57 (1957) (federal law governs actions based on violations of collective bargaining agreement under section 301 of the Labor Management Relations Act of 1947)).

PUBLIC VERSION

1047–48 (Fed. Cir. 2001) (strong interest in uniform rule re on-sale bar in patent cases justifies reliance on federal common law, generally informed by U.C.C. and Restatements of Contracts).

This uniform federal standard is “governed by widely recognized authorities such as the Restatement of Unfair Competition and the Uniform Trade Secrets Act.” *Id.* at 1328. These sources outline the general principles that have provided guidance in previous Commission decisions regarding trade secret matters. *See, e.g., Certain Processes for the Manufacture of Skinless Sausage Casings and Resulting Product*, Inv. No. 337-TA-148/169, Comm’n Decision Not to Review Initial Determination at 51-53 (Dec. 1984); *Certain Apparatus for the Continuous Production of Copper Rod*, Inv. No. 337-TA-52, Comm’n Op. at 42 (1979). *TianRui* effectively affirmed the Commission’s past practice with regard to misappropriation claims, and does not represent a change in the applicable law. *Tianrui*, 661 F.3d at 1322. Federal common law governs the misappropriation allegations in this proceeding.

2. Misappropriation of Trade Secrets

Widely recognized authorities such as the Restatement of Unfair Competition and the Uniform Trade Secrets Act, define a trade secret as “any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.” Restatement (Third) of Unfair Competition § 39 (1995). A trade secret derives independent economic value from not being generally known, and must be the subject of reasonable efforts under the circumstances to maintain its secrecy. Uniform Trade Secrets Act § 1(4) (as amended, 1985) (“UTSA”); *see On-Line Tech. v. Bodenseewerk Perkin-Elmer*, 386 F.3d

PUBLIC VERSION

1133, 1141 (Fed. Cir. 2004) (publicly available information, such as that in a patent, cannot be a trade secret).

While there are several recognized types of trade secret misappropriation, the type applicable in this case is defined as:

[D]isclosure or use of a trade secret of another without express or implied consent by a person who. . . at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was. . . acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use[.]

UTSA § 2(ii); *accord* Restatement (Third) Unfair Competition § 40(b). Specifically, “[a]n employee or former employee who uses or discloses a trade secret owned by the employer or former employer in breach of a duty of confidence is subject to liability for appropriation of the trade secret under the rule stated in § 40.” Restatement (Third) Unfair Competition § 42.

Thus, to prove misappropriation, Richtek must prove, by a preponderance of the evidence, that: (1) one or more trade secrets exist and are not within the public domain; (2) Richtek is the owner of the trade secret(s) or possesses a proprietary interest therein; (3) either Richtek disclosed the trade secret to uPI personnel while in a confidential relationship, or uPI wrongfully took the trade secret from Richtek by unfair means, and (4) uPI used or disclosed the trade secret, causing injury to Richtek. *See, e.g., Garment Hangers*, Inv. No. 337-TA-255, Initial Determination; *Sausage Casings*, Inv. No. 337-TA-148/169, Initial Determination.

PUBLIC VERSION

V. U.S. Patent No. 7,315,190

U.S. Patent No. 7,315,190 (“the ‘190 patent”) is titled “PWM Circuit and PWM Integrated Circuit for Use in PWM Circuit.” JX-1 (‘190 patent). The ‘190 patent was filed on June 16, 2006, and issued on January 1, 2008, and the named inventor is Isaac Y. Chen. *Id.* The ‘190 patent “relates to a PWM (Pulse Width Modulation) circuit, and in particular to a PWM integrated circuit capable of receiving an external programming signal without any extra pin, and a PWM integrated circuit for use in such a PWM circuit.” *Id.* at col. 1, lns. 5-11 (Field of the Invention).

The ‘190 patent has 34 claims, seven of which are independent claims. In the original investigation, Richtek asserted apparatus claims 1-11 and 26-27 against each of the respondents. JX-12 (uPI consent order); Joint Outline Regarding Issues to be Decided (EDIS Doc. No. 475301) (“Ground Rule 12 Filing”) at 2. Claims 1, 26, and 27 are independent claims. Claims 2, 3, 5, 6, 8, and 10 depend from claim 1. Of the remaining claims, claim 4 depends from claim 3; claim 7 depends from claim 6; claim 9 depends from claim 8; and claim 11 depends from claim 10. JX-1 at col. 7, ln. 2 – col. 10, ln. 18.

The asserted apparatus claims read as follows:

1. A pulse width modulation circuit comprising:
 - a first and a second switch electrically connected with each other through a node between them, said node being capable of providing a voltage signal;
 - a PWM integrated circuit, including
 - (a) a plurality of pins including a first pin for controlling said first switch, a second pin for controlling said second switch, and a third pin for receiving said voltage signal from said node; and

PUBLIC VERSION

(b) a programming unit electrically connected with one of said first pin and second pin, for receiving a programming signal to program a parameter of said pulse width modulation integrated circuit; and

a parameter setting circuit electrically connected with said one of said first pin and second pin.

2. The pulse width modulation circuit of claim 1, wherein said parameter setting circuit is a resistor, and said programming unit includes a constant current source electrically connected with said one of said first pin and second pin.

3. The pulse width modulation circuit of claim 1, wherein said pulse width modulation integrated circuit further includes a comparator, and wherein said programming unit is electrically connected with an output of said comparator, whereby during a normal operation mode, said programming unit transmits said output of said comparator to said one of said first pin and second pin, while in a programming mode, said programming unit receives said programming signal.

4. The pulse width modulation circuit of claim 3, wherein said programming unit switches between said normal operation mode and said programming mode according to an enable signal.

5. The pulse width modulation circuit of claim 1, wherein said pulse width modulation integrated circuit further includes a comparator, and wherein said programming unit includes a tri-state driver gate whose input is electrically connected with an output of said comparator and whose output is electrically connected with said one of said first pin and second pin; said tri-state driver gate being controlled by an enable signal to switch between a first mode wherein said output of said tri-state driver gate transmits a signal received at its said input, and a second mode wherein said output of said tri-state driver gate is floating.

6. The pulse width modulation circuit of claim 1, wherein said programming unit further includes a storage circuit to store said programming signal.

7. The pulse width modulation circuit of claim 6, wherein said programming signal is stored by said storage circuit, and the stored signal is compared with said voltage signal from said node to generate an over current protection signal thereby.

PUBLIC VERSION

8. The pulse width modulation circuit of claim **1**, wherein said programming unit further includes:

- an analogue-to-digital converter circuit electrically connected with said one of said first pin and second pin to receive and convert said programming signal into a digital signal,
- a storage circuit electrically connected with said analogue-to-digital converter circuit to store said digital signal, and
- a digital-to-analogue converter circuit electrically connected with said storage circuit to convert said digital signal into an analogous voltage signal.

9. The pulse width modulation circuit of claim **8**, wherein said analogue-to-digital converter circuit converts said programming signal into a digital signal of at least one bit.

10. The pulse width modulation circuit of claim **1**, wherein said programming unit includes:

- an analogue-to-digital converter circuit electrically connected with said one of said first pin and second pin to receive and convert said programming signal into a digital signal, and
- a storage circuit electrically connected with said analogue-to-digital converter circuit to store said digital signal, and providing an digital output to program a parameter in said pulse width modulation integrated circuit.

11. The pulse width modulation circuit of claim **10**, wherein said analogue-to-digital converter circuit converts said programming signal into a digital signal of at least one bit.

26. A pulse width modulation integrated circuit comprising:

- a comparator generating at least two outputs;
- at least two pins electrically connected with said two outputs, respectively; and
- a programming unit electrically connected with at least one of said two pins for receiving an external programming signal to program a parameter of the pulse width modulation integrated circuit,

wherein said programming unit is electrically connected with at least one of said two outputs of said comparator, and is capable of switching between a first mode wherein said programming unit transmits at least one of said two outputs of said comparator to one of said two pins, and a second

PUBLIC VERSION

mode wherein said programming unit receives said external programming signal.

27. A pulse width modulation integrated circuit comprising:

a comparator generating at least two outputs;

at least two pins electrically connected with said two outputs, respectively; and

a programming unit electrically connected with at least one of said two pins for receiving an external programming signal to program a parameter of the pulse width modulation integrated circuit,

wherein said programming unit includes a tri-state driver gate whose input is electrically connected with one of said two outputs of said comparator, and whose output is electrically connected with one of said pins; said tri-state driver gate being capable of switching between a first mode wherein said output of said tri-state driver gate transmits a signal received at its said input, and a second mode wherein said output of said tri-state driver gate is floating.

JX-1 at col. 7, ln. 2 – col. 8, ln. 15; col. 9, ln. 51 – col. 10, ln. 18.

A. Claim Construction

There is only one claim term disputed by the parties. Ground Rule 12 Filing at 2.

1. Level of Ordinary Skill in the Art

Richtek's expert, Dr. Mark Horenstein, testified that the relevant field of art for the '190 patent is "switching power supplies such as DC-DC converters using PWM control techniques," and that a person of ordinary skill in the art would possess either (1) a bachelor's degree in electrical engineering and two to four years of relevant work experience in the area of switching power supplies and PWM techniques; or (2) a master's degree in electrical engineering studying switching power supplies and PWM control techniques, plus at least one to two years of relevant work experience. CX-15C (Horenstein WS) at 15.

PUBLIC VERSION

Respondents' expert witness, Mr. Joseph McAlexander, likewise testified that "a person of ordinary skill in the art would have a bachelors degree in Electrical Engineering, or the equivalent education, and several years experience with the design of IC devices, or the equivalent work experience or knowledge of IC design in general." RX-241C (McAlexander WS) at 5.

The Staff argues that a person of ordinary skill in the art would have a bachelor's degree in electrical engineering and several years of relevant work experience or a master's degree in electrical engineering plus one or two years of relevant work experience. Staff Br. at 61.

The administrative law judge finds that a person of ordinary skill in the art would have a bachelor's degree in Electrical Engineering, or the equivalent education, and several years of experience with the design of IC devices, or the equivalent work experience or knowledge of IC design in general.

2. "programming unit"

Below is a chart showing the parties' proposed claim constructions.

Claim Term	Richtek's Construction	uPI's Construction	Staff's Construction
"programming unit"	a unit that programs	Means-plus-function element means is "receiving a programming signal to program a parameter of said pulse-width modulation integrated circuit" "The structure disclosed in the specification for performing the aforementioned function is the set of structures in Figure 5, in conjunction with any ADC or DAC circuits disclosed in U.S. Patent 7,042,773, which is incorporated by reference into the '190 patent."	a unit that programs

CDX-811-1; Ground Rule 12 Filing at 2.

The claim term “programming unit” appears in asserted claims 1, 2, 3, 4, 5, 6, 8, 10, 26, and 27. JX-1.²⁷

Richtek construes the term to mean “a unit that programs.” CDX-811-1. uPI argues that this term is a means-plus-function element. *Id.*; Resp. Br. at 82-83. uPI construes the function of the term to mean “receiving a programming signal to program a parameter of said pulse-width modulation integrated circuit.” CDX-811-1. uPI construes the structure of the term to mean “[t]he structure disclosed in the specification for performing the aforementioned function is the set of structures in Figure 5, in conjunction with any ADC or DAC circuits disclosed in U.S. Patent 7,042,773, which is incorporated by reference into the ‘190 patent.” CDX-811-1. The Staff construes the term to mean “a unit that programs.” Staff Br. at 64.

As proposed by Richtek and the Staff, the claim term “programming unit” is construed to mean “a unit that programs.”

The plain and ordinary meaning of the claim term “programming unit” is “a unit that programs.” The undersigned finds that no further construction is necessary. *See* CX-15C (Horenstein WS) at 22.

uPI argues that the term should be treated as a “means-plus-function” element according to 35 U.S.C. § 112 para. 6 because “the claim element is drafted as a function to be performed without reciting sufficient structure.” Resp. Br. at 82-83; RX-241C (McAlexander WS) at 8-10. There is nothing in the asserted claims to suggest that “programming unit” is a means-plus-function term.

²⁷ The term also appears in non-asserted claims. JX-1.

PUBLIC VERSION

In general, the failure to use the word “means” in a claim element creates a rebuttable presumption that 35 U.S.C. § 112, paragraph 6 does not apply. *Watts v. XL Systems, Inc.*, 232 F.3d 877, 881 (Fed. Cir. 2000). This presumption can be rebutted by showing that the claim element recites a function without reciting sufficient structure for performing that function. *Id.* at 881; *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002); *In the Matter of Certain Display Controllers and Products Containing Same*, Inv. No. 337-TA-491, Initial Det. at 17 (Apr. 14, 2004). The asserted claims of the ‘190 patent recite sufficient structure to allow one of ordinary skill in the art to understand the term “programming unit” as used in the claims. *See* CX-15C (Horenstein WS) at 22-24.

A claim element contains sufficient structure if the term as described has an understood meaning in the art. *Watts*, 232 F.3d at 881. Here, the relevant language of independent claim 1 discloses “a programming unit electrically connected with one of said first pin and second pin, for receiving a programming signal to program a parameter of said pulse width modulation integrated circuit.” JX-1 at col. 7, lns. 11-14. Claims 26 and 27 disclose a similar structure, describing a programming unit “electrically connected with at least one of said two pins[.]” *Id.* at col. 9, lns. 57-58, col. 10, lns. 6-7. Dependent claim 6 discloses a programming unit that “further includes a storage circuit to store said programming signal.” *Id.* at col. 7, lns. 46-48. Dependent claim 8 discloses a programming unit that further includes an analogue-to-digital converter (“ADC”) circuit electrically connected with one of the two pins, a storage circuit electrically connected with the ADC circuit, and a digital-to-analogue converter (“DAC”) circuit electrically connected with the storage circuit. *Id.* at col. 7, lns. 55-64. Finally, dependent claim 10

discloses a programming unit that further includes an ADC circuit electrically connected with one of the two pins and a storage circuit electrically connected with the ADC circuit. *Id.* at col. 8, lns. 3-11. Each asserted claim that references a “programming unit” discloses sufficient structure for a person of ordinary skill to understand the meaning of the term without referring to the specification. Accordingly, no means-plus-function analysis is necessary with regard to the asserted claims of the ‘190 patent.

B. Infringement Analysis of the ‘190 Patent

1. Accused Products

The over-current protection (“OCP”) feature in all accused 61xx chips functions in the same basic way, through a configuration process that occurs only once at power-up. As shown in the datasheet for the representative uP6101 product, during normal operation the OCP circuit monitors the voltage at the node between the two switching transistors, and when that voltage exceeds a predetermined threshold, the operation of the chip is shut down. This threshold level is established during a short period of time following the initial power-up of the chip. *See, e.g.,* CX-15C (Horenstein WS) at 27-32; CX-310 (uP6101 datasheet) at RTK00003114, RTK00003117 to RTK00003118.

A downstream manufacturer has the option of connecting a resistor to the LG (or lower gate) pin of the uP6101 chip, which during normal operation outputs a signal that is used for the gate of the lower switching transistor. In such cases the threshold level is set immediately after initial power-up by measuring the voltage drop across that resistor while passing a known current through the resistor from a current source within the uP6101 chip. If there is no resistor attached to the LG pin, then the OCP threshold level is set to its maximum value on power-up. *See Id.* at RTK00003119. There is evidence

that the circuitry used for over-current protection is materially the same in all of the accused 61xx chips, and that the uP6101 chip is representative of all accused products in the 61xx family. *See* CX-15C (Horenstein WS) at 26; CX-310 (uP6101 datasheet).

2. Direct Infringement

For the reasons set forth below, Richtek has shown that uPI's accused products directly infringe all asserted claims of the '190 patent.

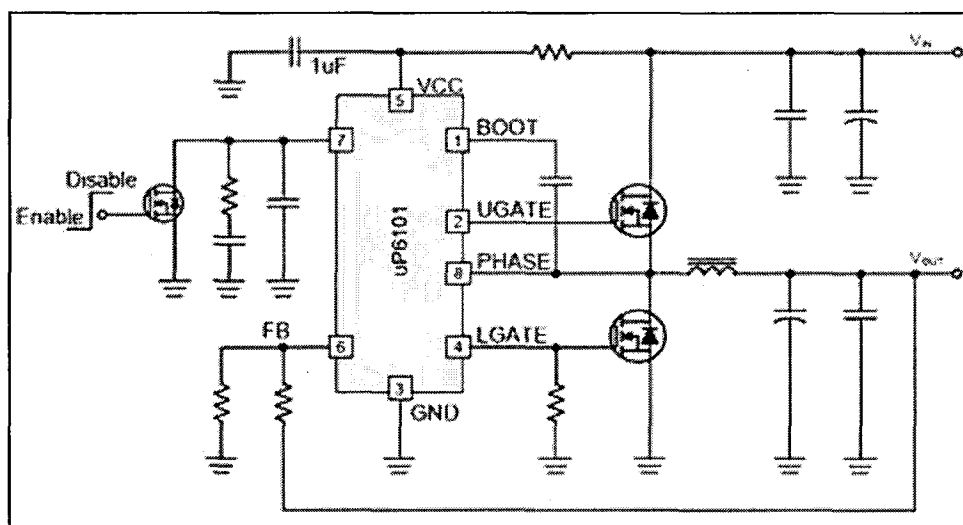
Richtek alleges that uPI's 61xx family of DC-to-DC controllers ("61xx chips") infringes claims 1-11 and 26-27 of the '190 patent. Ground Rule 12 Filing at 2. The accused 61xx chips are all single-phase DC-to-DC controllers, which must be connected in a circuit with one or more external switching transistors before they can perform the general function of receiving an input voltage and then providing an output voltage to be used by other devices or circuits. *See* CX-15C-B (Horenstein Corrected WS) at 26-27. In this regard, by itself the 61xx chip is analogous to the "PWM integrated circuit" defined in the '190 patent, while the installed 61xx chip with external circuitry corresponds to the larger "PWM circuit" defined in the patent. *See* JX-1 at col. 1, lns. 37-41.

Accordingly, the accused 61xx chips, standing alone, do not directly infringe any of the asserted claims of the '190 patent, because not all required elements of the asserted claims reside within the actual 61xx chip. For example, the "first and a second switch electrically connected with each other through a node between them" disclosed in asserted claim 1 would appear in adjacent external circuitry rather than within the single-phase chip itself. *See Id.* at col. 7, lns. 1-5. Dr. Horenstein testified, however, that the 61xx chips are never used without being connected to at least two MOSFET circuits

PUBLIC VERSION

connected to pins 2 and 4, and that in that configuration the accused boards and cards containing the uP61xx controllers, as well as the controllers themselves, “infringe, directly and indirectly, claims 1-11 and 26-27 of the 190 patent.” CX-15C (Horenstein WS) at 26, 189.

The accused 61xx chips infringe the asserted claims of the ‘190 patent when incorporated into an evaluation board or one of the accused downstream products. The uP6101 datasheet depicts a typical application circuit for a 61xx chip installed in one of these devices:



*CX-310: Typical Application Circuit for uP6101 Chip
uP6101 datasheet at RTK00003114*

Claim 1

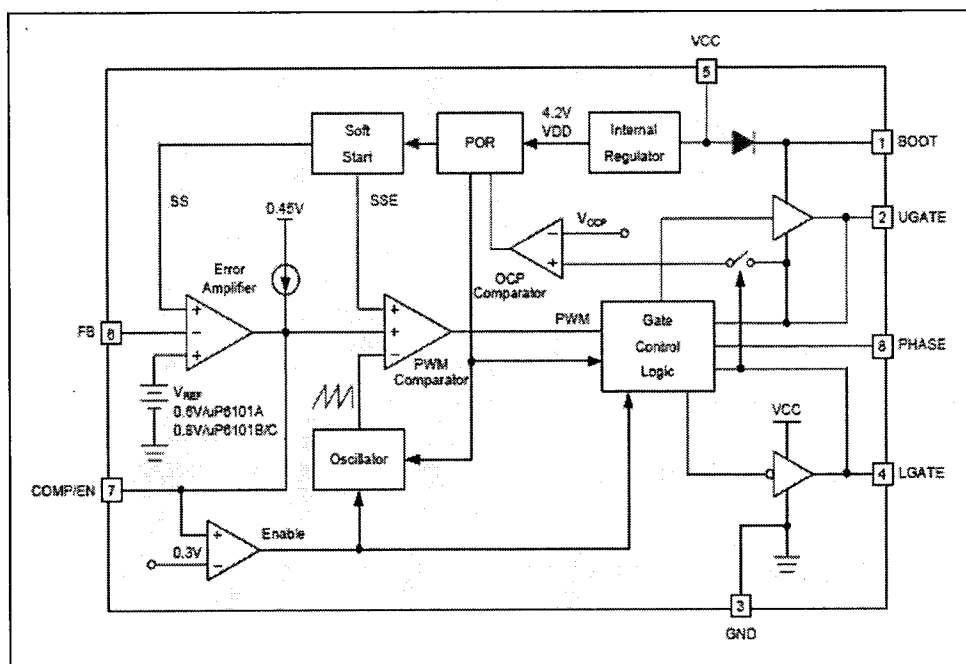
As shown in the uP6101 datasheet and in the schematics for the uP6101 circuit, every required element of independent claim 1 is present in a 61xx chip installed in an application circuit. The entire diagram depicts the “pulse width modulation circuit” of

PUBLIC VERSION

asserted claim 1, while the uP6101 chip itself, shown as a shaded rectangle, acts as a “PWM integrated circuit” as defined by the ‘190 patent.

The circuit includes “a first and a second switch,” identified as MOSFET transistors UGATE and LGATE, respectively. In the above diagram, these transistors are depicted in the circles connected by lines to pins 2 and 4 of the uP6101 chip. CX-15C (Horenstein WS) at 65-66. The UGATE and LGATE transistors are “electrically connected with each other through a node between them” and this PHASE node is “capable of providing a voltage signal” V_{OUT} . See JX-1 at col. 7, lns. 3-5.

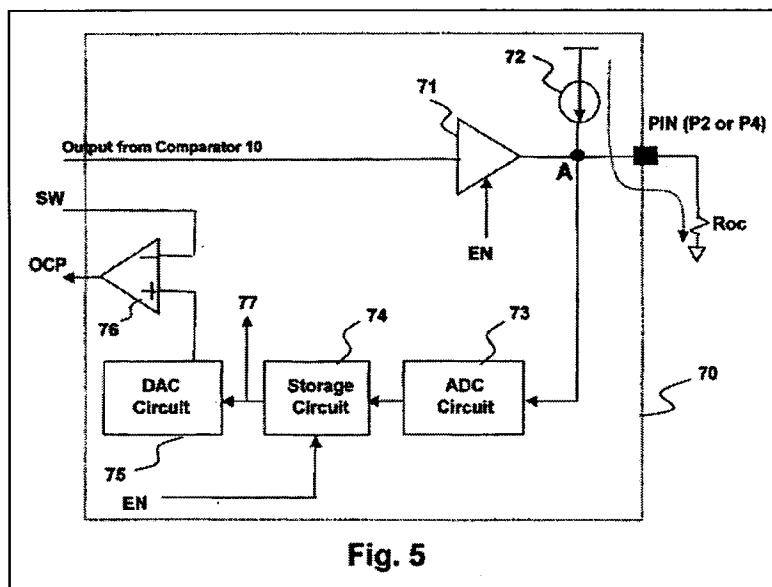
All of the elements of the “PWM integrated circuit” of claim 1 are present within the uP6101 chip itself. As shown in the functional block diagram provided in the uP6101 datasheet, the chip contains “a plurality of pins,” PIN1 through PIN8. A “first pin” PIN2 controls the external UGATE “first switch,” while a “second pin” PIN4 controls the external LGATE “second switch[.]” A “third pin” PIN8 receives “said voltage signal” V_{OUT} from the external PHASE node. CX-310 at RTK00003116.



CX-310: Functional Block Diagram for uP6101 Chip, uP6101 datasheet at RTK00003116

As proposed by Richtek and the Staff, the claim term “programming unit” has been construed to mean “a unit that programs.”

The uP6101 contains a “programming unit.” The uP6101 chip contains a programming unit corresponding to the unit depicted in Figure 5 of the ‘190 patent. *See Id.* at Fig. 5.



JX-1 at FIG. 5 (programming unit)

The programming unit is “electrically connected with one of said first pin and second pin,” specifically to PIN4 (LGATE), “for receiving a programming signal[.]” *See Id.* (‘190 patent) at col. 7, lns. 11-14; CX-15C (Horenstein WS) at 32 (“The Application Circuits on the data sheets for the accused uP61xx products include a parameter-setting circuit having a resistor ROCP and LGATE Pin 4 along with an electrical connection in between.”). This programming signal, V_{OCP} , is used “to program a parameter of said pulse width modulation integrated circuit[.]” namely the over-current protection (“OCP”) threshold level. *See JX-1* at col. 7, lns. 11-16; CX-310 (uP6101 datasheet) at RTK00003116 (showing OCP Comparator receiving V_{OCP} voltage signal). The V_{OCP} signal issues from a circuit consisting of a resistor R_{OCP} electrically connected to PIN4 (LGATE). *See JX-1* at col. 7, lns. 11-16 (requiring “a parameter setting circuit electrically connected with said one of said first pin and second pin”). The amount of resistance selected for R_{OCP} determines the value of the V_{OCP} voltage signal, which is passed through PIN4 (LGATE) to the programming unit, which then programs the OCP

level based on the V_{OCP} programming signal received. *See* CX-15C (Horenstein WS) at 32 (“The value selected for R_{OCP} determines the V_{OCP} voltage signal across the R_{OCP} resistor, and that programming signal is received on LGATE Pin 4 within the controller to set the OCP threshold level”).

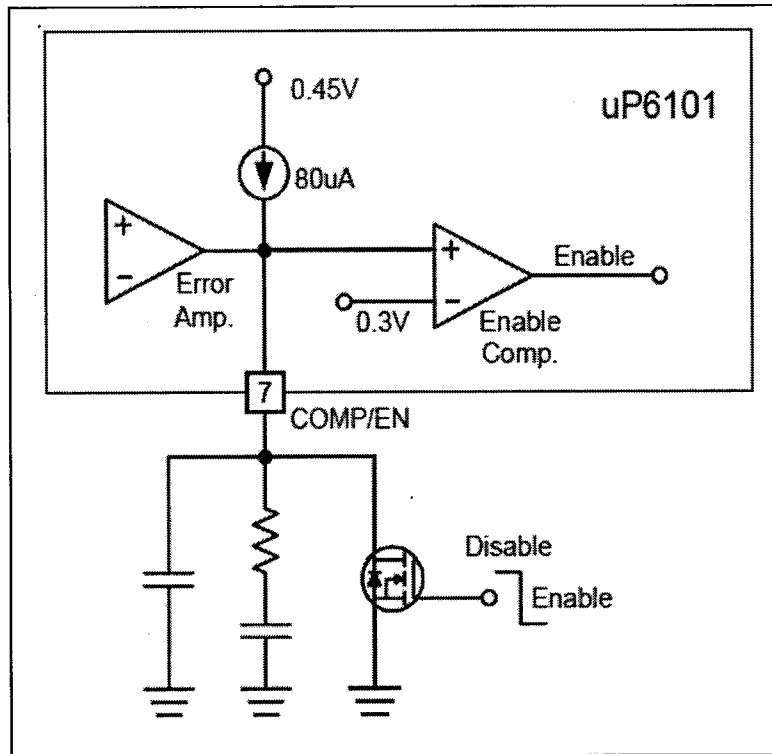
Claims 2-11

The 61xx chips infringe dependent claims 2 through 11. With regard to asserted claims 2 and 3, [

] CX-189C (uP6101 circuit schematics) at UPIITC0000052. The uP6101 chip also includes a comparator, “whereby during a normal operation mode, said programming unit transmits said output of said comparator to said one of said first pin and second pin, while in a programming mode, said programming unit receives said programming signal.” JX-1 at col. 7, ln. 2 – col. 8, ln. 15; *see* CX-189C [

] CX-15C (Horenstein WS) at 67.

The evidence demonstrates that the 61xx chips infringe asserted claim 4 because the programming unit in those chips switches between normal operation mode and programming mode according to an enable signal. *See* JX-1 at col. 7, lns. 30-33; CX-310 (uP6101 datasheet) at RTK00003117.



CX-310 (uP6101 datasheet) at RTK00003117

As to asserted claim 5, the uP6101 datasheet describes a comparator [] consisting of transistors that connect the comparator with the LGATE pin 4. CX-15C (Horenstein WS) at 68-69; CX-310 at RTK00003118 to -03119.

The 61xx chips infringe asserted claims 6 and 7 by [] See CX-189C (circuit schematics); CX-310 (uP6101 datasheet); CX-15C (Horenstein WS) at 69-70.

Asserted claims 8-11 are infringed by the 61xx chips as well. []

[CX-15C (Horenstein WS) at 70-72.

Claims 26-27

The 61xx chips infringe independent claims 26 and 27 of the '190 patent. In addition to all of the components discussed above in connection with asserted claim 1, the 61xx chips also incorporate a comparator. This comparator, [] contains all of the essential elements of claims 26 and 27:

- at least two outputs;
- at least two pins electrically connected with these two outputs, respectively; and
- a programming unit electrically connected with at least one of these two pins;
- an external programming signal causing the programming unit to switch between (1) outputting at least one of the two comparator outputs to one of the two pins, and (2) receiving the external programming signal; and
- a tri-state driver gate with an output electrically connected with one of the two pins and capable of switching between (1) transmitting a received input signal, and (2) allowing the output of the driver gate to "float" (have no effect on the circuit).

See CX-189C, uP6101 circuit schematics; CX-15C (Horenstein WS) at 72-77.

3. Indirect Infringement

Richtek contends that uPI actively contributes and induces others to infringe the asserted claims of the '190 patent with the accused uP61xx chips, and the uP61xx chips contribute to the direct infringement of the asserted claims of the '190 patent. Compls. Br. at 69, 77-79. The evidence shows that uPI sells its chips to distributors who sell them

PUBLIC VERSION

to downstream customers for incorporation into graphics cards and motherboards, many of which are subsequently imported into the United States for sale. *See, e.g.*, CX-9C-B (Foty Corrected WS) at 41-43; CX-5C (Cox WS) at 6-8. uPI is aware that its 61xx chips are especially made for incorporation into such products, and that they have no other substantial commercial uses. *Id.*; *see Golden Blount*, 365 F.3d at 1061 (respondent must have known that intended use of its components was infringing and that components had “no substantial noninfringing uses.”). As discussed above, a typical application of a uPI 61xx chip in a circuit board directly infringes the asserted claims of the ‘190 patent. *See, e.g., RF Delaware*, 326 F.3d at 1268 (direct infringement by some entity prerequisite to finding indirect infringement).

Nevertheless, uPI has not contributorily infringed the ‘190 patent, because uPI sells its 61xx products outside the United States for assembly into downstream products outside the United States. To be liable as a contributory infringer, a respondent must “offer[] to sell or sell[] *within the United States* or import[] into the United States” some component, material or apparatus for use in a patented product or process. 35 U.S.C. § 271(c) (emphasis added). There is testimony from uPI witnesses that all of uPI’s sales activity occurs outside the United States. RX-235C (Chang WS) at 12; RX-237C (Ko WS) at 6-7 (sole U.S. sales channel terminated before any sales made).

Richtek also contends that uPI indirectly infringes the ‘190 patent by actively inducing others to directly infringe. Compls. Br. at 69, 77-78. *See* 35 U.S.C. § 271(b). Inducement can consist of instructing, directing, or advertising to a third party the means for directly infringing a patent. *See, e.g., Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries Inc.*, 145 F.3d 1303, 1312 (Fed. Cir. 1998). Specific intent to induce

PUBLIC VERSION

infringement can be shown through circumstantial evidence. *See Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 699 (Fed. Cir. 2008). In this case, there is evidence that uPI publishes datasheets for its customers explaining how to integrate 61xx chips into graphics boards and other downstream products that thereby infringe the asserted claims of the ‘190 patent. *See, e.g.*, CX-310 (uP6101 datasheet). The sole purpose of these datasheets is to instruct creators of reference designs such as AMD, and board makers such as Sapphire, on how to connect the necessary external circuitry to a 61xx chip to create a circuit that uPI knew or should have known would infringe the ‘190 patent. Therefore, if uPI’s 61xx chips infringe the asserted claims when implemented in a typical application circuit, then uPI may have “knowingly aid[ed], abet[ted], encourag[ed], participat[ed] in, or induc[ed]” its customers to import and/or sell infringing products. *See* JX-12 (uPI consent order) at 1-2. Yet in this case, uPI has engaged in good faith efforts to prevent its customers from importing and/or selling such infringing products *in the United States*, as opposed to overseas. *See, e.g.*, RX-45C to RX-48C (contractual agreements with customers limiting sales of formerly accused products to territories outside the United States); RX-44C (uPI sample packing lists to China displaying restriction clause prohibiting shipment to United States).

VI. U.S. Patent No. 6,414,470

U.S. Patent No. 6,414,470 (“the ‘470 patent”) is titled “Apparatus and Method for Balancing Channel Currents in a Multi-Phase DC-to-DC Converter.” JX-5 (‘470 patent). The ‘470 patent was filed on January 22, 2002 and issued on July 2, 2002. *Id.* The named inventors are Jing-Meng (James) Liu, Liang-Pin (Ben) Tai, and Hung-I (Miles) Wang. *Id.* The ‘470 patent “relates generally to a multi-phase DC-to-DC converter, and

PUBLIC VERSION

more particularly, to an apparatus and method for balancing the channel currents in a multi-phase DC-to-DC converter.” *Id.* at col. 1, lns. 5-10 (Field of the Invention).

The ‘470 patent has 39 claims, including eight independent claims, of which Richtek asserts independent method claims 29 and 34. JX-12 (uPI consent order); Ground Rule 12 Filing at 2.

The asserted method claims read as follows:

29. A method for current balance in a multi-phase DC-to-DC converter having a converter output for providing an output voltage and a plurality of channels each configured for generating a channel current, said method comprising the steps of:

- sensing said output voltage to thereby determine a voltage sense signal;
- sensing each of said plurality of channel currents to thereby determine a plurality of current sense signals;
- comparing said voltage sense signal with a reference signal to thereby determine an error signal;
- generating a plurality of PWM signals by a plurality of multi-input pulse width modulators each comparing said error signal with a ramp signal and one of said plurality of current sense signals with each other of said plurality of current sense signals; and
- regulating said channel currents with said plurality of PWM signals.

34. A method for current balance in an N-phase DC-to-DC converter having a converter output for providing an output voltage and N channels each configured for generating a channel current, said method comprising the steps of:

- sensing said output voltage to thereby determine a voltage sense signal;
- sensing each of said channel currents to thereby determine N current sense signals;
- comparing said voltage sense signal with a reference signal to thereby determine an error signal;

PUBLIC VERSION

generating N PWM signals each derived from a respective differential signal produced by subtracting a ramp signal and N-1 times of a respective one of said current sense signals from a summation of said error signal and each other of said plurality of current sense signals; and regulating said channel currents with said N PWM signals.

JX-5 at col. 11, lns. 40-58, col. 12, lns. 35-52.

A. Claim Construction

There are only two claim terms disputed by the parties. Ground Rule 12 Filing at

2.

1. Level of Ordinary Skill in the Art

Complainants' expert, Dr. Horenstein, testified that the relevant field of art and the level of ordinary skill in that art is the same for the '470 patent for the '190 patent. CX-15C (Horenstein WS) at 15, 207. Respondents' expert, Mr. McAlexander, also testified that the same skill level is applicable to the person of ordinary skill in both the '190 and '470 patents. RX-241C (McAlexander WS) at 5. As with the '190 patent, the Staff argues that neither Richtek nor uPI have identified any differences between their two hypothetical persons of ordinary skill that would be likely to affect the Judge's analysis of the '470 patent. Thus, the Staff does not advocate adoption of either set of qualifications in lieu of the other. Staff Br. at 77.

The administrative law judge finds that a person of ordinary skill in the art would have a bachelor's degree in Electrical Engineering, or the equivalent education, and several years experience with the design of IC devices, or the equivalent work experience or knowledge of IC design in general.

2. “converter”

Claim Term	Richtek’s Construction	uPI’s Construction	Staff’s Construction
“converter”	a circuit capable of converting electricity at one DC voltage level to electricity at another DC voltage level	a power switching device whose inputs and outputs are powered at different voltage levels, where the power switching device includes an inductor, a capacitor, at least one power transistor, and a controller controlling the switching operation of the power switching device	customary and ordinary meaning (consistent with Complainants’ construction)

Staff Br. at 77; Ground Rule 12 Filing at 2.

The claim term “converter” appears in asserted claims 29 and 34. JX-5.²⁸

Richtek construes the term to mean “a circuit capable of converting electricity at one DC voltage level to electricity at another DC voltage level.” Compls. Br. at 80. uPI construes the term to mean “a power switching device whose inputs and outputs are powered at different voltage levels, where the power switching device includes an inductor, a capacitor, at least one power transistor, and a controller controlling the switching operation of the power switching device.” Resp. Br. at 74. The Staff argues that the term should be given its customary and ordinary meaning, consistent with Richtek’s construction. Staff Br. at 77-78.

As proposed by Richtek and the Staff, the claim term “converter” is construed to mean “a circuit capable of converting electricity at one DC voltage level to electricity at another DC voltage level.”

The parties appear to agree that the term “DC-DC converter” is universally known to those of ordinary skill and well understood in the power industry and relevant art.

²⁸ The term also appears in non-asserted claims. JX-5.

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Compare CX-15C-B (Horenstein Corrected WS) at 210 (those of ordinary skill in the art would accept the IEEE Dictionary definition of “[a] machine, device, or system, typically combining the functions of inversion and rectification, for changing dc at one voltage to dc at a different voltage”) (citing CX-2350 (IEEE Dictionary)); *with* RX-241C (McAlexander WS) at 30-31 (“A converter is understood by a person of ordinary skill in the art to switch input power at one DC voltage level to provide output power at a different DC voltage level.”). Accordingly, there is no need to construe the term at all. When a claim term already has a readily-apparent ordinary meaning, it should not be reconstrued for the mere purpose of substituting new “construction” language. *See O2 Micro*, 521 F.3d at 1360; *U.S. Surgical Corp.*, 103 F.3d at 1568. uPI would expand this generally understood definition to limit the term to converters that include “an inductor, a capacitor, at least one power transistor, and a controller[.]” RX-241C (McAlexander WS) at 29. There is nothing in the claim language, specification, or prosecution history of the ‘490 patent to suggest that the term “converters” should be limited to this subset of DC-DC converters.

3. “multi-input pulse width modulator”

Claim Term	Richtek's Construction	uPI's Construction	Staff's Construction
“multi-input pulse width modulator”	a circuit that generates a pulse width modulated signal based on two or more inputs	a comparator that compares more than one pair of input signals and that outputs a pulse width modulated signal	a circuit with more than one pair of inputs that outputs a pulse width modulated signal

Staff Br. at 77; Ground Rule 12 Filing at 2.

The claim term “multi-input pulse width modulator” appears in asserted claim 29.

JX-5.²⁹

Richtek construes the term to mean “a circuit that generates a pulse width modulated signal based on two or more inputs.” Compl. Br. at 80. uPI construes the term to mean “a comparator that compares more than one pair of input signals and that outputs a pulse width modulated signal.” Resp. Br. at 75-76. The Staff construes the term to mean “a circuit with more than one pair of inputs that outputs a pulse width modulated signal.” Staff Br. at 77-79.

As proposed by the Staff, the claim term “multi-input pulse width modulator” is construed to mean “circuit with more than one pair of inputs that outputs a pulse width modulated signal.”

The ‘470 patent specification shows that the term “multi-input” should be understood as “more than one pair of inputs.” While all of the pulse width modulators described in the ‘470 patent must accept at least two inputs, the ‘470 patent distinguishes on several occasions between “multi-input” and “ordinary” PWM circuits. *See, e.g.*, JX-5 at Abstract, col. 2, lns. 1-12. An “ordinary pulse width modulator” compares a ramp signal to a combined input signal received from a multi-input comparator. *Id.* at Abstract, col. 2, lns. 8-12. A “multi-input” PWM compares the ramp signal with an error signal and “the corresponding channel current with each other of the channel currents[.]” *Id.* at Abstract, col. 2, lns. 4-7, FIGs. 2-3. Thus, an ordinary PWM has two inputs, while a multi-input PWM has more than two.

Moreover, the inputs to the multi-input PWMs described in the patent must come in pairs – one for the channel current being evaluated and one for one other channel

²⁹ The term also appears in non-asserted claims. JX-5.

current for comparison. *See Id.* FIGs. 2-3. Accordingly, in order to give meaning to the distinction that the ‘470 patent draws between ordinary and multi-input PWM circuits, a “multi-input pulse width modulator” must be construed as a PWM circuit with multiple *pairs* of inputs.

B. Infringement Analysis of the ‘470 Patent

For the reasons set forth below, Richtek has shown that certain uPI’s accused products directly infringe all asserted claims of the ‘470 patent.

1. Formerly Accused 62xx Products

Richtek alleges that the products in uPI’s formerly accused 62xx family of DC-to-DC controllers (“62xx chips”) infringe claims 29 and 34 of the ‘470 patent. Compls. Br. at 79. All of the chips in the 62xx family are dual-phase or multi-phase DC-to-DC converters that use individual pulse width modulators (“PWMs”) to control each current channel within the converter. CX-15C (Horenstein WS) at 195-97, 213-19; CX-330C to CX-347C (62xx datasheets). uPI’s datasheets for the 62xx chips each outline a “typical application” PWM circuit and describe how to integrate uPI’s 62xx chips into downstream products such as the accused evaluation boards and graphics cards. *Id.* Only some of uPI’s 62xx chips perform current balancing in a manner that infringes asserted claims 29 and 34 of the ‘470 patent.

As previously described, the ‘470 patent describes “an apparatus and method for current balance in a multiphase DC-to-DC converter with a converter output voltage and a plurality of channel currents[.]” JX-5 at Abstract. The asserted claims of the ‘470 patent disclose current balancing schemes that compare multiple “current sense signals”

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to one another, either directly, as in asserted claim 29, or as part of a particular mathematical operation, as in asserted claim 34. *Id.* An essential element of both asserted claims is the step of comparing each current sense signal to every other current sense signal. *See Id.* cols. 11-12.

In the original investigation, for discussion purposes respondents divided the 62xx family into four categories, each using a different current-balancing scheme:

Type 1	Type 2	Type 3	Type 4
uP6201 uP6203 uP6205 uP6209	uP6204 uP6206 uP6207 uP6210 uP6212 uP6219	uP6213 uP6214 uP6215 uP6216 uP6217	uP6208 uP6218

See RX-241C (McAlexander WS) at 35-36 (adding fifth category for products developed after date of consent order); RDX-22C (summary table). [

]. *See* CX-553C [

] CDX-903C [

] CDX-212C [

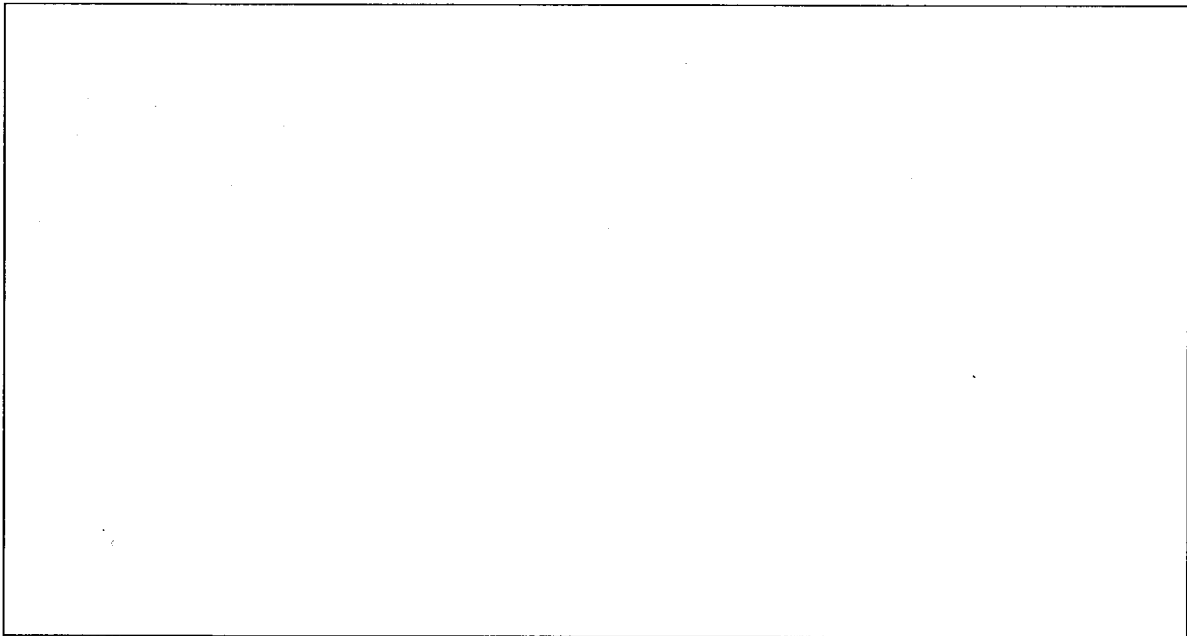
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uPI's "Type 2" and "Type 4" 62xx chips do not infringe either of the asserted claims of the '470 patent because neither product type uses two or more "current sense signals" to generate a pulse-width modulation signal for each channel that, in turn, is used to adjust that channel's output. [

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[

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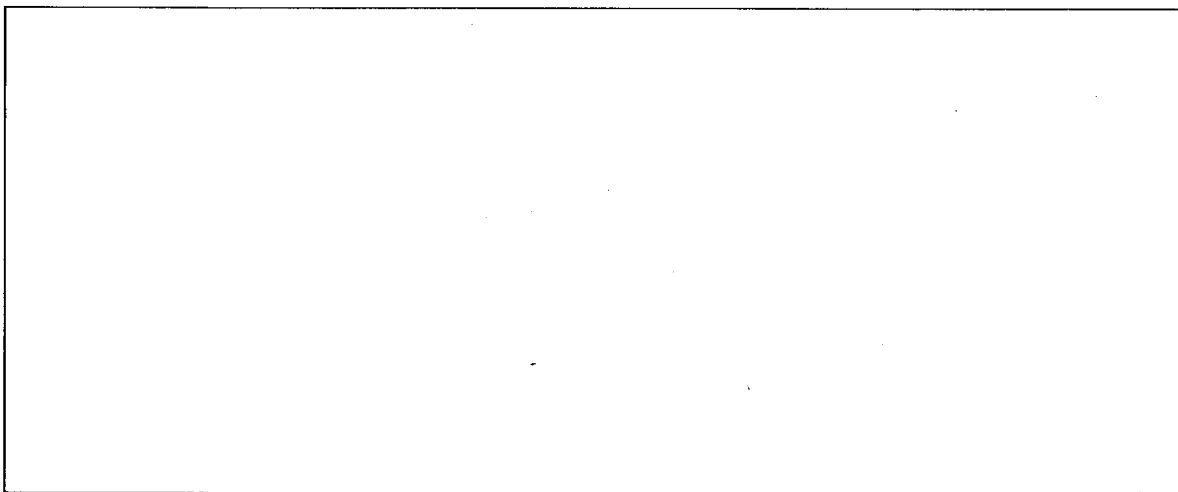


RDX-32C: [

]

RX-241C (McAlexander WS) at 44. [

]



RDX-44C: []

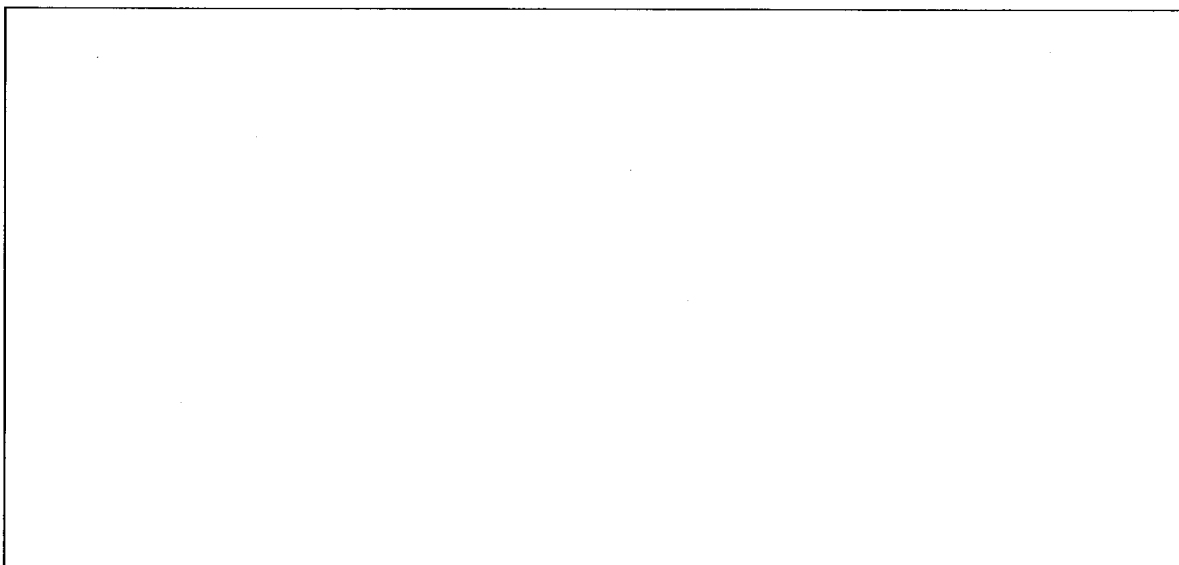
RX-241C (McAlexander WS) at 57. [

] uPI's Type 2 and Type 4 62xx chips do not infringe asserted claims 29 or 34 of the '470 patent.

Nevertheless, Type 1 and Type 3 62xx products do infringe both of the asserted claims. [

]

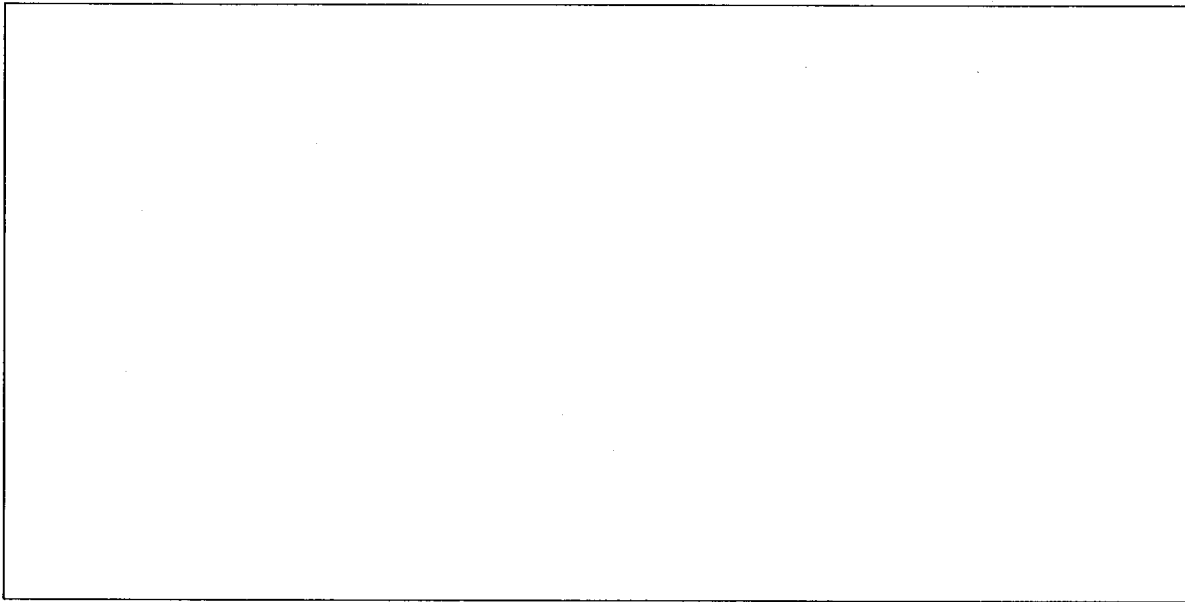
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RDX-25C: []

RX-241C (McAlexander WS) at 36. [

]



RDX-38C: []

RX-241C (McAlexander WS) at 50-51. Therefore, Richtek has established that each element of the asserted claims 29 and 34 of the '470 patent is satisfied by uPI's Type 1 and Type 3 controllers, []

2. Newly Accused 16xx Products

Richtek alleges that products in uPI's 16xx family of DC-to-DC controllers infringe claims 29 and 34 of the '470 patent. Compl. ¶ 77. The accused uP1601 and uP1604 chips are dual PWM controllers. *See* CX-0415 (uP1601 datasheet); CX-0416 (uP1604 datasheet). [

] CX-15C (Horenstein WS) at 219; CX-280 to CX-281 (uP1601/uP1604 circuit schematics). The accused uP1610 chip is a compact dual-phase synchronous-rectified buck controller. CX-0422 (uP1610 datasheet). All three of these products were developed after the effective date of the uPI consent order. All three

PUBLIC VERSION

products perform current balancing in a manner that infringes asserted claims 29 and 34 of the '470 patent.

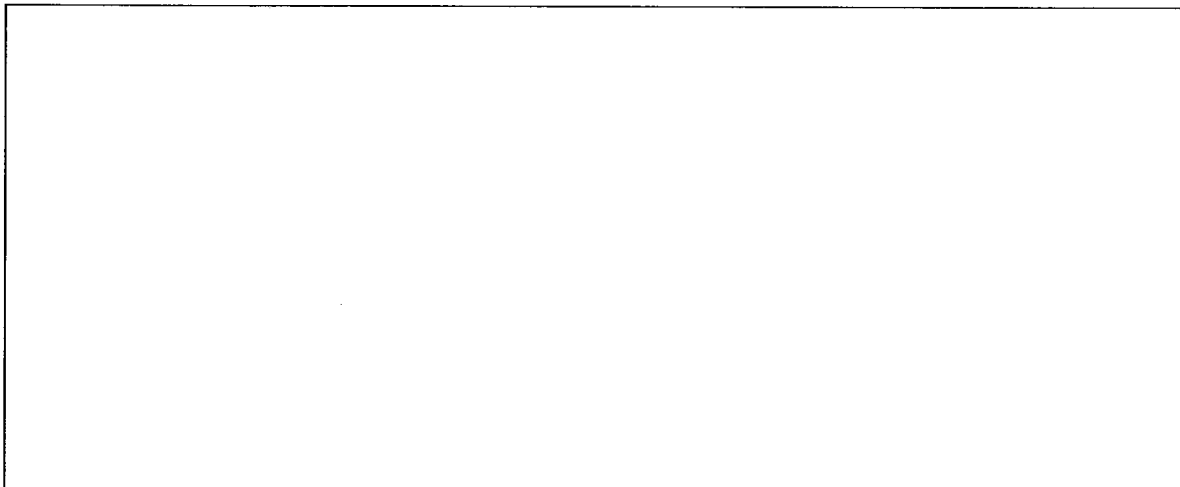
As discussed above, the asserted claims of the '470 patent disclose current balancing schemes that compare multiple "current sense signals" to one another, either directly, as in asserted claim 29, or as part of a particular mathematical operation, as in asserted claim 34. JX-5 at Abstract. An essential element of both asserted claims is the step of comparing each current sense signal to every other current sense signal. *See Id.* cols. 11-12.

In the original investigation, for discussion purposes respondents divided the 62xx products accused of infringing the '470 patent into four categories, each using a different current-balancing scheme. Respondent's expert witness, Mr. Joseph McAlexander, has added a fifth category for the current-balancing scheme used in the newly-developed uP1601, uP1604, and uP1610 products:

<i>Type 1</i>	<i>Type 2</i>	<i>Type 3</i>	<i>Type 4</i>	<i>Type 5</i>
<i>uP6201</i> <i>uP6203</i> <i>uP6205</i> <i>uP6209</i>	<i>uP6204</i> <i>uP6206</i> <i>uP6207</i> <i>uP6210</i> <i>uP6212</i> <i>uP6219</i>	<i>uP6213</i> <i>uP6214</i> <i>uP6215</i> <i>uP6216</i> <i>uP6217</i>	<i>uP6208</i> <i>uP6218</i>	uP1601 uP1604 uP1610

See RX-241C (McAlexander WS) at 35-36. [

]



RX-241C [(McAlexander WS) at 64-65: []

RX-241C (McAlexander WS) at 64-65. [

] Therefore, uPI’s newly-developed uP1601, uP1604, and uP1610 products infringe asserted claims 29 and 34 of the ‘470 patent. Thus, any imports, sales for importation, or sales after importation of these chips, or of downstream products containing these chips, would constitute a violation of uPI’s consent order if done after August 13, 2010, and without Richtek’s consent.

VII. U.S. Patent No. 7,132,717

U.S. Patent No. 7,132,717 (“the ‘717 patent”) is titled “Power Metal Oxide Semiconductor Transistor Layout with Lower Output Resistance and High Current

Limit.” JX-9 (‘717 patent). The ‘717 patent was filed on April 20, 2005, and issued on November 7, 2006. *Id.* The named inventors are Hung-Der (Honda) Su, Chun-Yen (Joshua) Huang, Chung-Lung (Ken) Pai and Jing-Meng (James) Liu. *Id.* The ‘717 patent “relates to a power metal oxide semiconductor transistor layout, and more particularly to a power metal oxide semiconductor transistor layout with a lower output resistance and a high current limit.” *Id.* at col. 1, lns. 8-12 (Field of the Invention).

The ‘717 patent has fourteen claims, two of which are independent. In the underlying investigation, Richtek asserted apparatus claims 1-3 and 6-9 of the ‘717 patent against each respondent. *See* JX-12 (uPI consent order); Ground Rule 12 Filing at 2. Claims 2-3 and 6-9 all depend from independent claim 1. JX-9.

The asserted apparatus claims read as follows:

1. A power metal oxide semiconductor transistor layout comprising:
 - a gate electrode with a lattice pattern on a substrate having a first area and a second area;
 - a plurality of source regions laid in said lattice pattern; a plurality of drain regions laid in said lattice pattern, each said source region is laid to be surrounded by said drain regions;
 - a first meshwork of conductive lead connecting said source regions on said first area;
 - a second conductive plane connecting said drain regions on said first area and over said first meshwork of conductive lead and said first area;
 - a third meshwork of conductive lead connecting said drain regions on said second area; and
 - a fourth conductive plane connecting said source regions on said second area and over said third meshwork of conductive lead and said second area, said first meshwork of conductive lead connects said fourth conductive plane,

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and said second conductive plane connects said third meshwork of conductive lead.

2. The power metal oxide semiconductor transistor layout according to claim 1, wherein said lattice pattern comprises a square lattice pattern.

3. The power metal oxide semiconductor transistor layout according to claim 1, wherein said lattice pattern comprises a rectangle lattice pattern.

6. The power metal oxide semiconductor transistor layout according to claim 1, wherein said first meshwork of conductive lead connects source contacts and well pickup contacts in said first area.

7. The power metal oxide semiconductor transistor layout according to claim 1, wherein said second conductive plane connects drain contacts in said first area.

8. The power metal oxide semiconductor transistor layout according to claim 1, wherein said third meshwork of conductive lead connects drain contacts in said second area.

9. The power metal oxide semiconductor transistor layout according to claim 1, wherein said fourth conductive plane connects source contacts and well pickup contacts in said second area.

JX-9 at col. 10, lns. 2-28, lns. 35-48.

A. Claim Construction

There is only one claim term disputed by the parties. Ground Rule 12 Filing at 2.

1. Level of Ordinary Skill in the Art

Respondents' expert, Dr. Peter Gwozdz, testified that a person of ordinary skill in the art to which the '717 patent pertains would have a minimum of: (1) a B.S. in Electrical Engineering, Material Engineering, Physics, or equivalent; and (2) five years of industry experience with IC development or equivalent, including at least one year in the art of interconnect layout for high current transistors. RX-239C (Gwozdz WS) at 24.

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Complainants' expert, Dr. Richard Blanchard, offered a similar definition: (1) a B.S. in Electrical Engineering or Solid State Physics with at least two years of experience in the design and layout of analog integrated circuits (ICs), including experience with power MOS transistor layouts; or (2) an M.S. in Electrical Engineering or Solid State Physics plus one to two years of experience in the design and layout of analog ICs, including experience with power MOS transistor layouts. CX-13C (Blanchard WS) at 10.

The Staff argues that there is no essential difference between experience in “the art of interconnect layout for high current transistors” and experience in “the design and layout of analog ICs, including . . . power MOS transistor layouts.” Staff Br. at 84. The Staff argues that for purposes of the ‘717 patent, a person of ordinary skill in the art will have at least a bachelor’s degree in electrical engineering or physics and one to five years of experience with analog IC and/or high-current transistor layouts. *Id.*

The administrative law judge finds that a person of ordinary skill in the art would have at least a bachelor’s degree in electrical engineering or physics and one to five years of experience with analog IC and/or high-current transistor layouts.

2. “meshwork of conductive lead”

Claim Term	Richtek’s Construction	uPI’s Construction	Staff’s Construction
“meshwork of conductive lead”	a netlike pattern or arrangement of conductive lead	a net-like structure of intersecting conductive lines	conductive lead arranged in a net-like pattern

Compls. Br. at 88; Resp. Br. at 90; Staff Br. at 85; Ground Rule 12 Filing at 2.

The claim term “meshwork of conductive lead” appears in asserted claims 1, 6,

and 8. JX-9.³⁰

Richtek construes the term to mean “a netlike pattern or arrangement of conductive lead.” Compl. Br. at 88. uPI construes the term to mean “a net-like structure of intersecting conductive lines.” Resp. Br. at 90. The Staff construes the term to mean “conductive lead arranged in a net-like pattern.” Staff Br. at 85.

As proposed by Richtek, the claim term “meshwork of conductive lead” is construed to mean “a netlike pattern or arrangement of conductive lead.”

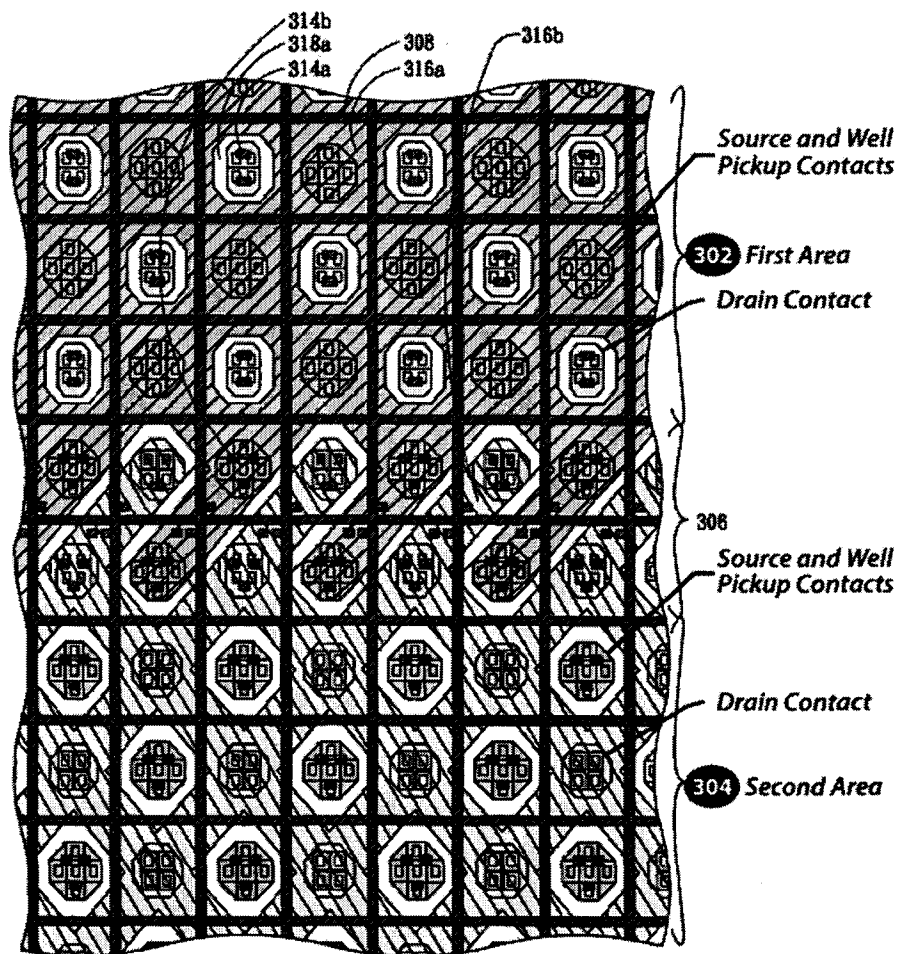
As seen from the parties’ proposed constructions, the parties agree that the term “meshwork” means a netlike pattern, arrangement or structure.

The parties’ construction of “meshwork” is consistent with the ‘717 patent. The ‘717 patent shows examples of a meshwork of conductive lead as a netlike pattern or arrangement in FIGS. 3-6. JX-9 at col. 5, lns. 54-59 (“FIG. 3F shows that the network of conductive lead line 316a in the area 302 connects the conductive plane 318b in the area 304 through the vias 314b. The network of conductive lead line 316a in the area 302 extends to the area 306 and connects the source regions 307 and well regions 301.”); col. 6, lns. 6-10 (“FIG. 3G shows a simplified cross sectional view along the diagonal of one drain region in the area 306 in which several elements are omitted to further explain the layout shown in FIG. 3E. FIG. 3G shows that the network of conductive lead line 316b in the area 304 connects the conductive plane 318a in the area 302 through the vias 314a.”); CX-13C (Blanchard WS) at 17-18.

Moreover, in support of Richtek’s proposed construction, Dr. Blanchard explained by using a demonstrative version of FIG. 3E that one can see a network of

³⁰ The term also appears in non-asserted claims 10, 11, and 13. JX-9.

conductive lead 316a (an example of the first meshwork, in pink), and a network of conductive lead 316b (an example of the third meshwork, in yellow), as having an “X” or crisscross pattern or arrangement.



CX-13C (Blanchard WS) at 18-19.

Accordingly, the claim term “meshwork of conductive lead” is construed to mean “a netlike pattern or arrangement of conductive lead.”

B. Infringement Analysis of the ‘717 Patent

For the reasons set forth below, Richtek has shown that uPI’s accused products directly infringe all asserted claims of the ‘717 patent.

PUBLIC VERSION

1. Formerly Accused 63xx Products

Richtek has accused uPI's uP63xx and uP6128 DC-to-DC controllers of infringing claims 1-3 and 6-9 of the '717 patent. Compls. Br. at 86. The accused 63xx chips, and particularly the uP6305, contain power MOS transistor layouts for a DC-DC controller. Layouts for power MOS transistors are designed using graphical software that creates graphical layout files, or "GDS" files, that a foundry can use to make masks defining the pattern of layers formed on semiconductor devices that make up the final chip. The GDS files define and describe the power MOS. By examining these files, it is possible to draw conclusions about the design and functioning of the ultimate manufactured chip. *See, e.g.,* CX-13C (Blanchard WS) 21-23.

The uP6305 chip is a high-efficiency synchronous-rectified buck controller. CX-353 (uP6305 datasheet) at 1; CX-228C (uP6305 circuit schematics). The uP6305 datasheet depicts a "typical application circuit" for products using the uP6305 chip. CX-353 (uP6305 datasheet) at 2. [

] which was also an accused product in the original investigation. CX-13C (Blanchard WS) at 23.

An analysis of the uP6305 circuit schematics demonstrates that the circuit contains power MOS transistor layouts that meet each and every element of claims 1-3 and 6-9 of the '717 patent. CX-13C (Blanchard WS) at 24-46; CX-228C (uP6305 circuit schematics); *see also* CX-353 (uP6305 datasheet). [

CX-13C

(Blanchard WS) at 26-27. [

]. *Id.* at 28-30; CX-228C []

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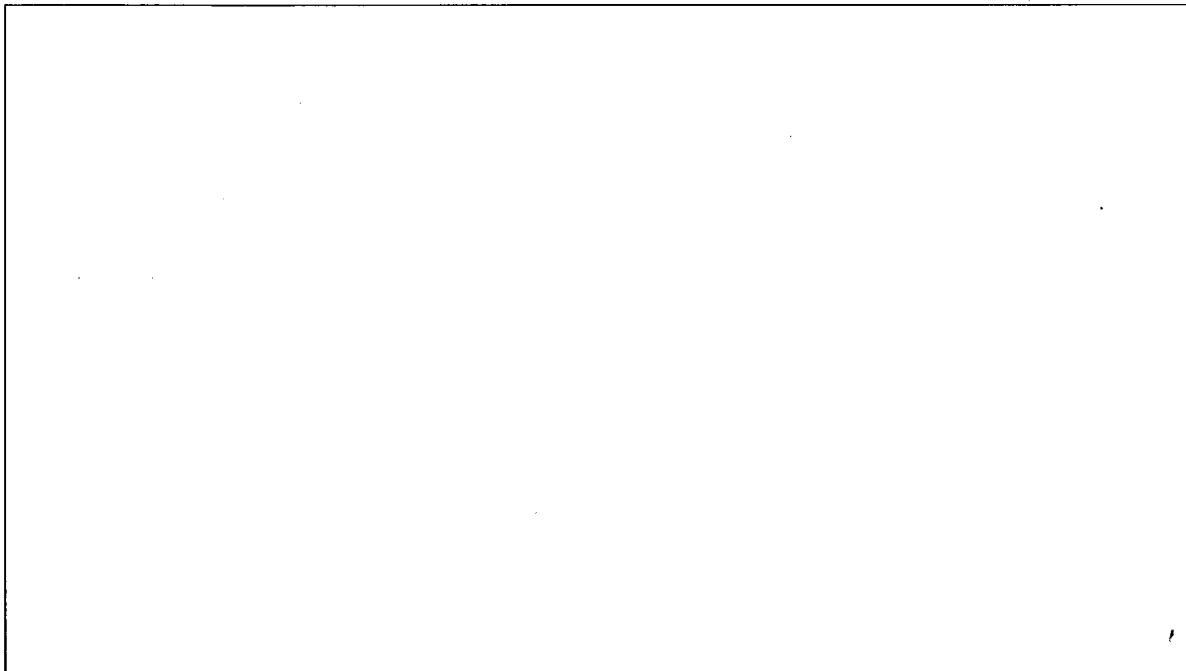
CX-353

].

CX-13C (Blanchard WS) at 30-32. [

]. *Id.* at 32-35. [

]. *Id.* at 35-38.



CDX-604C: [

]

Therefore, Richtek has established that each element of the asserted claims of the ‘717 patent is satisfied by uP6305 power MOS transistor layouts. CX-13C (Blanchard WS) at 24-38 (independent claim 1), 39-46 (dependent claims 2, 3, and 6-9).³¹

Accordingly, the uP6305 chip, either standing alone or as implemented in a typical application circuit in a downstream product, infringes claims 1-3 and 6-9 of the ‘717 patent. *Id.* at 24-46. Additionally, [] the evidence shows that the uP6128 chip infringes claims 1-3 and 6-9 of the ‘717 patent. *Id.* at 23, 46-67.

2. Newly Accused Products

The evidence demonstrates that uPI’s new uP7901 product infringes the ‘717 patent in the same manner as the formerly accused uP6305 product discussed above. Witness testimony has established that layouts for power MOS transistors are designed using graphical software that creates graphical layout files, or “GDS” files, that a foundry can use to make masks defining the pattern of layers formed on semiconductor devices that make up the final chip. The GDS files define and describe the power MOS. *See, e.g.,* CX-1C (Liu WS) at 3-5, 11-14; CX-13C (Blanchard WS) at 3. By examining these files, it is possible to draw conclusions about the design and functioning of the ultimate manufactured chip. Richtek’s expert, Dr. Richard Blanchard, testified that he examined the circuit schematics, datasheet, and .gds layout files for the uP7901 and determined that it contains power MOS transistor layouts for a DC-DC controller. CX-13C (Blanchard

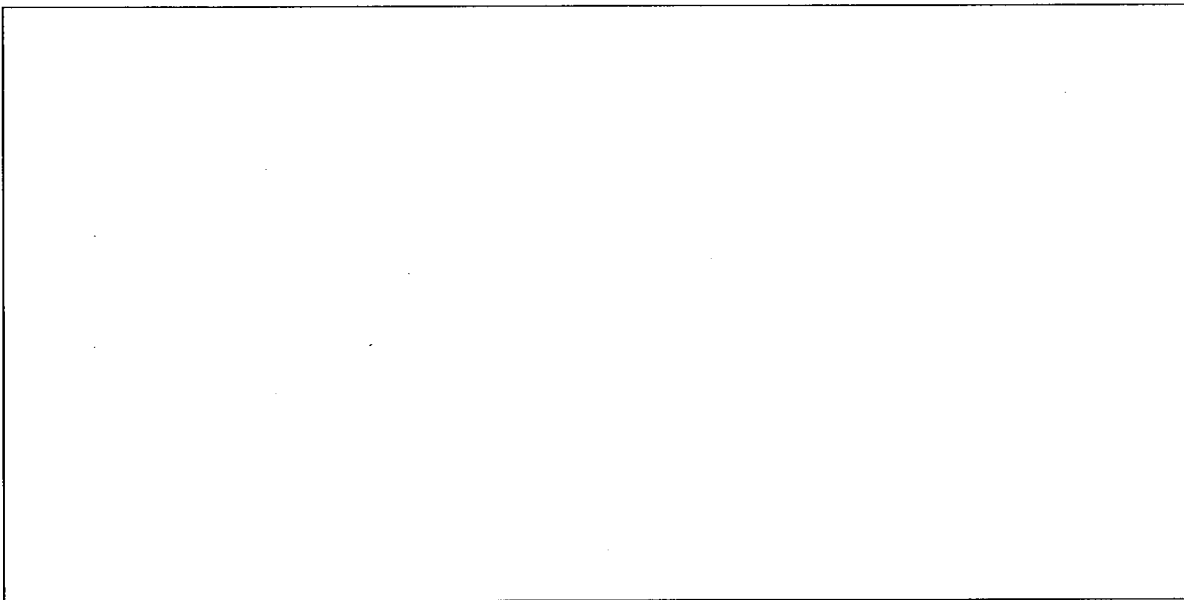
³¹ The elements of independent claim 1, and particularly the “meshwork of conductive lead,” were the focus of uPI’s non-infringement argument. *See* Resp. Br. at 91-96; Ground Rule 12 Filing at 2.

PUBLIC VERSION

WS) at 67. *See* CX-442 (uP7901 datasheet); CX-305C (uP7901 circuit schematics); CX-1112C (uP7901 screenshots). Dr. Blanchard testified that these power MOS transistor layouts meet each and every element of claims 1-3 and 6-9 of the '717 patent. CX-13C (Blanchard WS) at 67-88.

[

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CDX-671C: [

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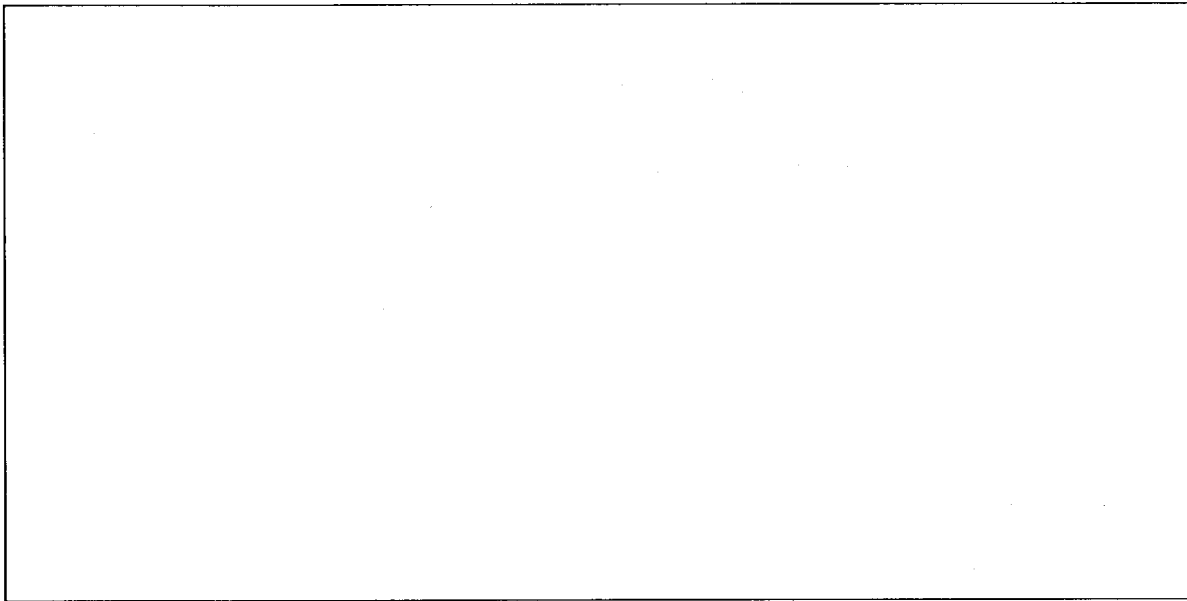
CX-13C (Blanchard WS) at 69-70; CX-1112C [

] at UPIITC-

ENF00782087. [

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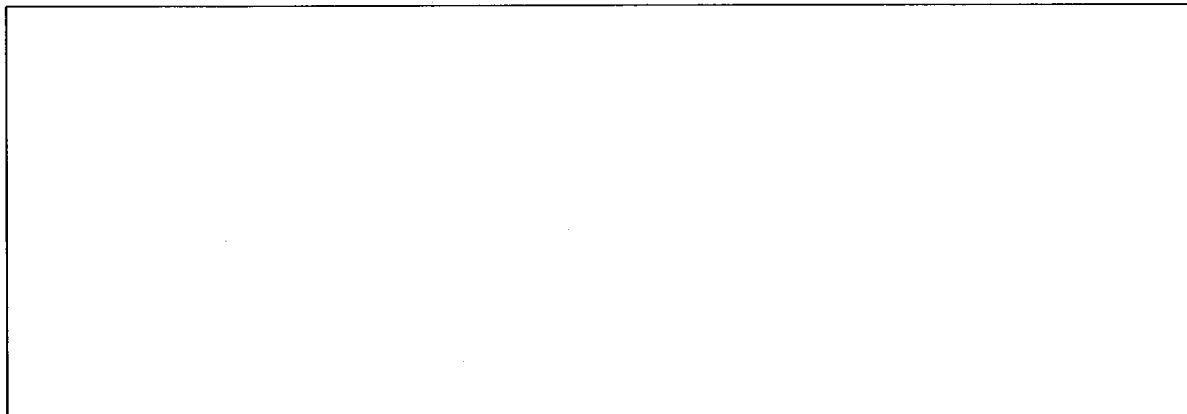


CDX-673C: []

CX-13C (Blanchard WS) at 70-72; CX-1112C [] at UPIITC-

ENF00782087. [

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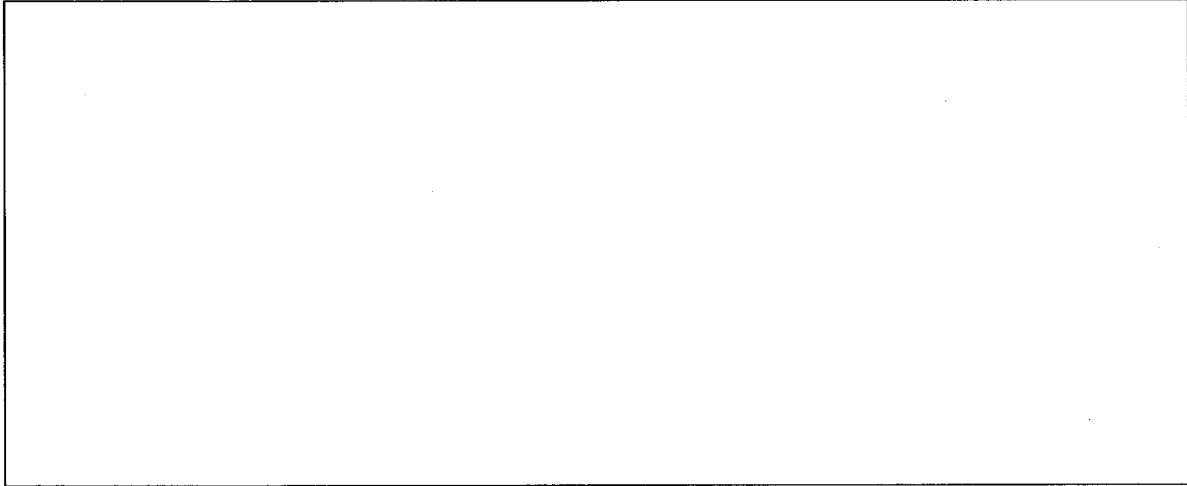


CDX-675C: []

CX-13C (Blanchard WS) at 73; CX-1112C [] at UPIITC-

ENF1498826). [

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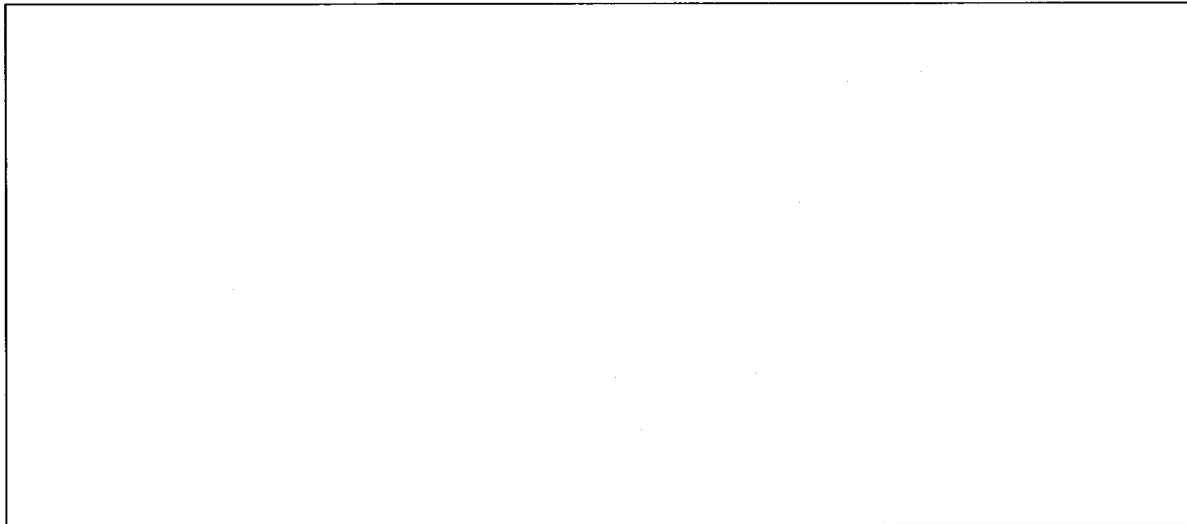


CDX-676C: []

CX-13C (Blanchard WS) at 74-75; CX-1112C [] at UPIITC-

ENF1498826. [

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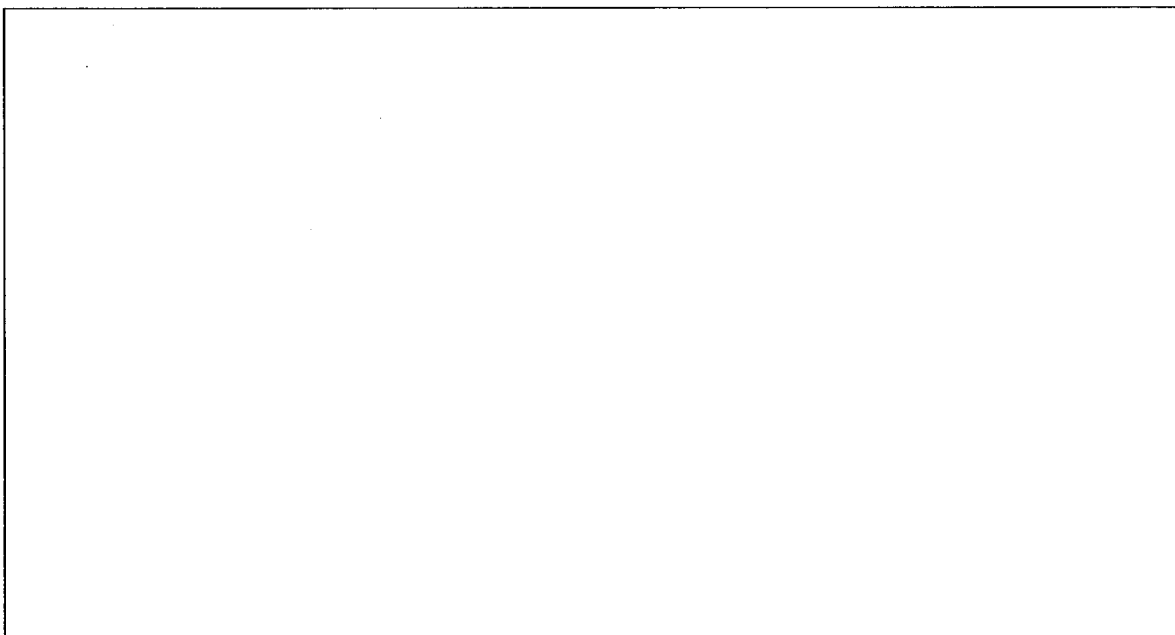


CDX-677C: []

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CX-13C (Blanchard WS) at 75-76; CX-1112C [] at UPIITC-
ENF1498826). Finally, [

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CDX-680C: [

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CX-13C (Blanchard WS) at 77-80; CX-1112C [] at UPIITC-
ENF1498826.

Accordingly, the uP7901 chip, standing alone or as implemented in a typical application circuit in a downstream product infringes asserted claim 1 of the '717 patent. CX-13C (Blanchard WS) at 67-81. Additionally, the evidence shows that the uP7901 chip infringes each of the asserted dependent claims 2, 3, and 6-9. *Id.* at 81-83 (claims 2 and 3), 83-87 (claims 6-9).

VIII. Trade Secrets

A. The Trade Secrets at Issue

In the underlying investigation, Richtek accused uPI of misappropriating a total of seventeen trade secrets that Richtek used to develop, market, and manufacture DC-to-DC controllers for customers in the United States. *See* CX-3C (A. Chen WS) at 1. The secrets were divided into business trade secrets (Trade Secret Nos. 1-10), and technical trade secrets (Trade Secret Nos. 11-17). CX-9C (Foty WS) at 5. Richtek accused uPI, and specifically uPI employees who were formerly employed at Richtek, of misappropriating these Richtek trade secrets when uPI was founded in December 2005, and using them to compete unfairly with Richtek in the market for DC-to-DC controllers.

In its enforcement complaint, Richtek asserts that uPI continues to benefit from Richtek's technical trade secrets (Nos. 11-17), alleging that uPI continues to produce and sell products based on designs that former Richtek employees unlawfully misappropriated from Richtek in 2005. *See, e.g.*, Enforcement Complaint, ¶¶ 11-13, 36-61. Richtek also accuses uPI of continuing to aid, abet, encourage, and induce others to incorporate infringing uPI DC-DC controllers into downstream products imported and sold in the United States.³² *Id.*, ¶¶ 62-73.

Of the seven technical trade secrets asserted in the original investigation, Richtek asserts three in this enforcement proceeding: Trade Secret 11 (Richtek's circuit schematics and symbol libraries), Trade Secret 12 (Richtek's circuit layouts and layout

³² Richtek has not alleged that uPI used or benefitted from Richtek's business trade secrets (Nos. 1-10) or from any of Richtek's other technical trade secrets after the consent order issued. *See* JX-12 (uPI consent order) (Aug. 13, 2010). Accordingly, Richtek trade secrets 1-10 and 14-17 are not at issue in this proceeding.

PUBLIC VERSION

files), and Trade Secret 13(a) (Richtek's ECS.ini files). *See* CX-7C (Jestice WS); CX-9C (Foty WS); CX-11C (Walker WS). Richtek has described the trade secrets currently at issue as follows:

Trade Secret No. 11: [

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Trade Secret No. 12: [

1.

Trade Secret No. 13: [

].

RX-220 at 19-27 (Richtek's Supp. Responses to uPI's Certain Interrogatories (Nov. 2, 2011) (citations to Bates ranges omitted)), *cited in* CX-9C (Foty WS) at 5.

B. Whether Richtek's Trade Secrets Were in the Public Domain

uPI agreed in the consent order not to challenge the validity of Richtek's trade secrets. JX-12 (uPI consent order) at 2. uPI does, however, argue that it developed its products independently of Richtek, and in some cases from publicly available information. *See, e.g.,* Resp. Br. at 37-44.

As described below, the record evidence shows that Richtek is in fact the owner of the information that it has identified as Trade Secret Nos. 11-13, and that the information identified is protected as a trade secret.

Richtek is asserting three categories of trade secrets in this enforcement proceeding, consisting of technical schematics and symbol libraries, circuit layouts and layout files, and other engineering files and related documents needed to create and manufacture Richtek's DC-to-DC controller products. These categories have been identified as Trade Secret 11 (Richtek's circuit schematics and symbol libraries), Trade

PUBLIC VERSION

Secret 12 (Richtek's circuit layouts and layout files), and Trade Secret 13 (including Richtek's ECS.ini files). *See* CX-7C (Jestice WS); CX-9C (Foty WS); CX-11C (Walker WS).

Each of these three categories consists of genuine trade secrets that derive economic value from being kept concealed from the general public. While individual components of a schematic or other technical document, such as a "switch transistor" or "MOSFET" or "conductive lead," may be well-known in the industry, a schematic or layout as a whole has an economic value greater than the sum of its parts. *See, e.g., Cal. Int'l Chem. Co., Inc. v. Sister H. Corp.*, 168 F.3d 498 at 1 (9th Cir. 1999) (rejecting defendant's argument that technology at issue was not unique).

Before a DC-DC controller can be incorporated into end-user products, the controller must be designed to meet the downstream manufacturer's reference design requirements. CX-4C (Timm WS) at 5. Designing an integrated circuit to fit within a specific reference design is time-intensive and involves a series of design and development stages, performed in cooperation with the end customer. CX-1C (Liu WS) at 2, 5; CX-4C (Timm WS) at 6-7. Richtek has gone through this lengthy multi-stage process with U.S.-based customers for each of its DC-DC controllers, including [

]. In the process, it created a series of engineering files and other technical documents that are both valuable and proprietary and form the design-in infrastructure on which Richtek's business is based. CX-62C (production history of Richtek products); CX-1C (Liu WS) at 6, 10, 11-14. This design infrastructure consists of various databases and programs, including symbol libraries,

PUBLIC VERSION

spice model libraries and initiation files, technology files, GDS layout files, and command files that set the definitions, settings, and parameters for the design tools that Richtek uses, such as []. CX-1C (Liu WS) at 10.

This infrastructure of engineering files and technical documents has economic value. With a design infrastructure in place, Richtek engineers can design new circuits by re-using reliable, tested initialization files, symbols, circuits, and circuit layouts. This allows Richtek to design and produce a new product more quickly and at lower cost, with a greater certainty that the product will function as designed. These factors provide Richtek with a competitive edge in the marketplace. CX-1C (Liu WS) at 10. There is evidence that loss of this competitive edge through misappropriation of Richtek's confidential information would cause injury to Richtek in the form of lost profits and market share. *See, e.g.,* CX-9C (Foty WS) at 67 [

]

The evidence also shows that Richtek took reasonable steps under the circumstances to protect the secrecy of its technical design infrastructure. *See* UTSA § 1(4). [

] *See, e.g.,* CX-63C to

CX-96C (employment undertaking agreements and resignation applications for Richtek employees who later joined uPI). Richtek employee Albert Chen testified that Richtek took steps to train its employees to identify confidential and trade secret information.

[

] CX-3C (A.

Chen WS) at 4; CX-97C []

[

] CX-98C [] CX-3C (A. Chen WS) at 2-

7. The record contains sufficient evidence that Richtek made reasonable efforts to preserve the secrecy of its trade secrets. Thus, the Richtek technical documents identified as Trade Secrets 11-13 are protected trade secrets.

C. Misappropriation of Richtek's Trade Secrets

1. Before the Consent Order

Many of uPI's employees, particularly its founders and management team, are former Richtek employees. These include the following, in the order of their departure from Richtek:

uPI Employee	Former Position at Richtek	Departure Date from Richtek
Jacky Lee	Layout Engineer	11/30/2005
James Chang	Project Manager of Marketing	12/05/2005
Aje Tu (Jay)	Application Engineering Manager	12/30/2005
Vincent Wen	Senior Project Manager	12/30/2005
Eric Huang	IC Circuit Design Engineer	01/27/2006
George Chou	IC Circuit Design Engineer	01/27/2006
Ivy Yang	Layout Engineer	02/09/2006
Stone Hung	Senior Application Engineer	03/06/2006

PUBLIC VERSION

Y.P. Huang	Director of R&D Department	04/12/2006
Ken Wang	Special Project Sales Manager	08/31/2006
Amanda Tai	Marketing Manager	11/22/2006
Owen Hsu	Application Engineer	11/30/2006
J.C. Chen	Manager R&D	10/20/2007

CX-1C (Liu WS) at 7-9; CDX-3C. These employees were key participants in the design of Richtek's 2005-2006 product lines, and as indicated above, [

] See CX-63C to CX-96C. As such, they had access to Richtek's most sensitive and confidential technical trade secrets and could not have been unaware of the importance of those secrets to Richtek's business. CX-1C (Liu WS) at 7-11; CDX-4C, CDX-6C (lists of projects handled by above employees).

As Richtek employees, each of these workers had a duty of confidence with regard to Richtek's confidential information. As former employees, they had a duty neither to use nor to disclose the trade secrets that they had accessed while employed at Richtek. See Restatement (Third) Unfair Competition § 42. Inasmuch as the aspects of Richtek's design infrastructure described in Trade Secrets 11, 12, and 13 qualify for protection as trade secrets, any former Richtek employee who used those engineering files and documents to create uPI designs, or disclosed those files and documents to other uPI employees, "is subject to liability for appropriation of the trade secret[.]" *Id.*

Nevertheless, the evidence shows that uPI personnel used trade secret information obtained from Richtek to make products that competed directly with Richtek products in the U.S. market. Richtek's expert Dr. Foty testified that based on the extent of the similarities between uPI's technical documents and Richtek's, it is his opinion that uPI acquired "vast quantities of Richtek proprietary, trade-secret information without

PUBLIC VERSION

authorization from Richtek” through former Richtek employees. CX-9C (Foty WS) at

58. For example, the evidence on which Dr. Foty’s opinion is based shows that:

[

]

PUBLIC VERSION

These examples, and the numerous others on which Dr. Foty's opinion rests, are sufficient to establish that uPI employees used Richtek trade secrets to design uPI's first DC-DC controllers, which became the 61xx, 62xx, 63xx, and 77xx uPI product families accused in the original investigation. Even without a comparison of uPI and Richtek schematics, the weight of the evidence suggests that the accused uPI product families were created with the assistance of misappropriated Richtek documents and files.

Examining the similarities between the uPI and Richtek designs supports this conclusion. Regarding Trade Secret 11 (Richtek's circuit schematics and symbol libraries), Dr. Foty testified that the same circuits found in Richtek model RT8805 are also present in the formerly accused uPI products. *See CX-9C (Foty WS) at 102-33.* For example, [

]. *Id.* at 102-05; *compare CX-49C (Richtek) with CX-205C (uPI).* Dr. Foty testified that [

]. *Id.* at 109-10.

PUBLIC VERSION

[

]

CDX-231C: [

]

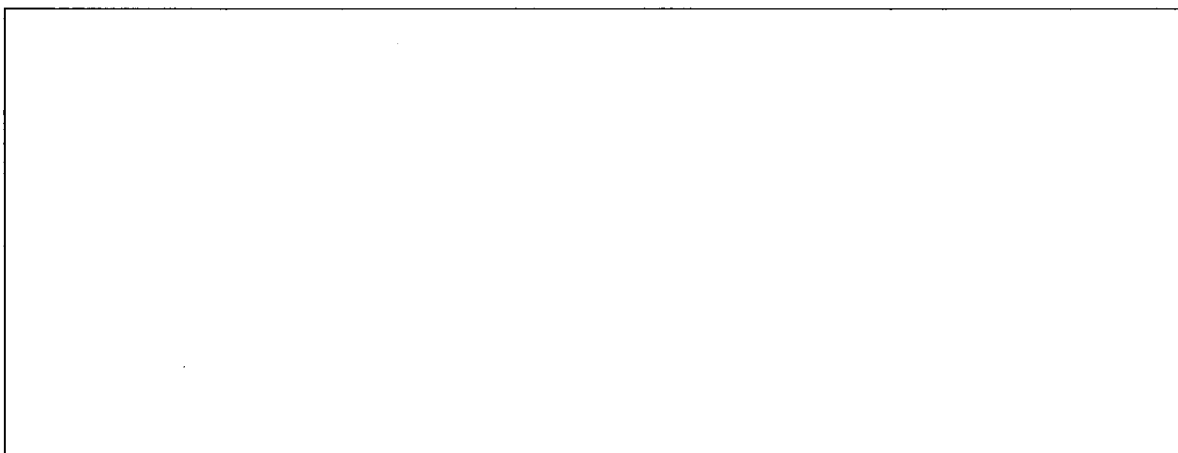
Similarly, with regard to Trade Secret 12 (Richtek's circuit layouts and layout files), [

]. CX-9C (Foty WS) at 133-70. For example, a comparison of the

[

]. *Id.* at 142-54.

PUBLIC VERSION



CDX-293C: Comparing CX-913C [] with CX-1172C []

Finally, regarding Trade Secret 13 (Richtek's ECS.ini files), []

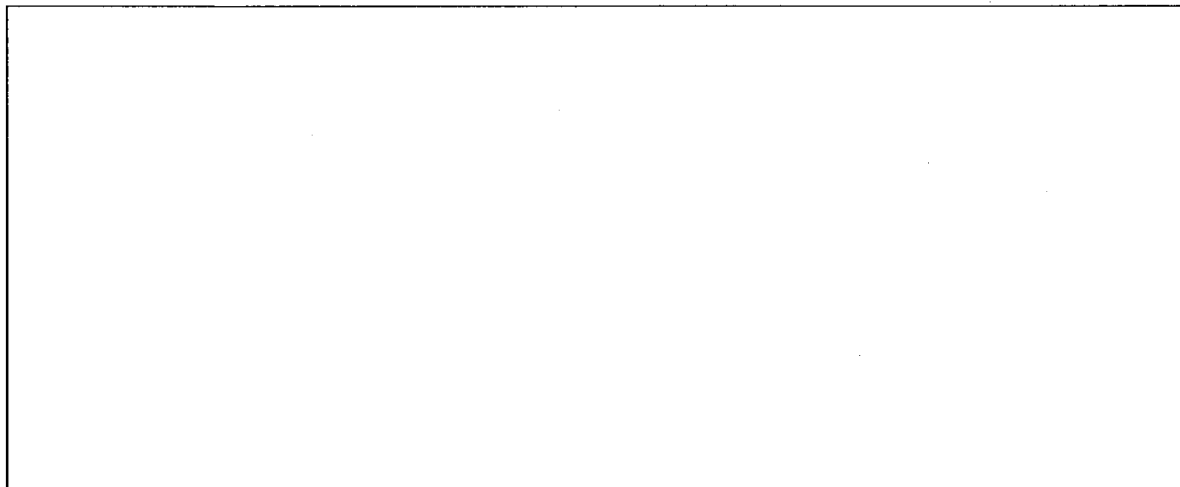
See CX-9C

(Foty WS) at 76-90. An ECS.ini file is an initialization file for providing "attributes, settings, definitions and parameters loaded by EDA software tools used for viewing and creating circuit schematics." *Id.* at 76; *see also* CX-7C (Jestice WS) at 2. Dr. Foty compared [] (CX-52C), with the [] (CX-188C). He also compared []

[]. *See* CX-1002 []. Dr. Foty determined that significant sections of Richtek's and uPI's ECS.ini files are "absolutely identical down to the smallest level of detail[.]" while the "generic" ECS.ini file, which is intended to be copied and reused, is completely different." CX-9C (Foty WS) at 79-83;

PUBLIC VERSION

see also CX-7C (Jestice WS) at 8-24 (concurring with Dr. Foty's conclusion after statistical analysis of 2976 ECS.ini files).



[CDX-221C: Comparison of Richtek and uPI [
]

For every specific detail that appears to be the same in both Richtek and uPI's files, there may be potential explanations for the similarity other than misappropriation of Richtek's files. *See, e.g.,* RX-242C (Min WS) at 7, 10-19 [

electrical engineering terms)]. When the number of similarities is viewed as a whole, however, and then considered in light of the e-mail evidence discussed above, the weight of the evidence favors the conclusion that uPI personnel did in fact injure Richtek by misappropriating and using Richtek's technical trade secrets to create the uPI 61xx, 62xx, 63xx, and 77xx product designs.

Consequently, any importation, sale for importation, or sale after importation of these formerly accused products by uPI after August 13, 2010 constitutes a violation of

PUBLIC VERSION

the uPI consent order unless done with Richtek's consent (including the consent found in Richtek's agreements with uPI's downstream customers).

2. After the Consent Order

As discussed above, uPI personnel unlawfully used and disclosed Richtek trade secrets that they acquired in violation of their duty of confidence towards Richtek as former Richtek employees. *See* Restatement (Third) Unfair Competition § 42. uPI used Richtek's trade secrets in the development of the uPI product families formerly accused in the original violation proceeding. The evidence does not show, however, that every DC-DC controller developed at uPI is necessarily derived from Richtek's trade secrets and is therefore subject to the uPI consent order. uPI took steps following the original investigation that were sufficient to ensure that its post-consent order products were not contaminated by unlawfully obtained material. Accordingly, uPI's newly developed products are not derived from Richtek trade secrets and do not violate the uPI consent order when imported or sold in the United States.

Inasmuch as misappropriation involves the use of confidential information belonging to another, one defense to a misappropriation charge is to show that the accused entity independently developed an embodiment of the trade secret(s) at issue.

Where the plaintiff shows that it possesses valuable secrets, confidentially disclosed to the defendant, followed by manufacture of a closely similar device by the defendant, the burden shifts to the defendant to show that, at the time, it could have arrived at the process by independent invention, inspection, or reverse engineering.

Henry Hope X-Ray Products, Inc. v. Marron Carrel, 674 F.2d 1336, 1341 (9th Cir. 1982). After entering into the consent order, uPI created a "clean room procedure"

PUBLIC VERSION

intended to ensure that the research and product development for its next generation of DC-DC controllers would be entirely independent of any knowledge uPI personnel might have had about Richtek's products and operations. Respondent's expert, Dr. John Kelly, testified to the following:

- In early 2010, uPI began development of a new line of linear regulator, buck converter and buck controller chips. The base designs for these chips were produced by outside circuit developers who had never worked for uPI and had never worked for Richtek. RX-240C (Kelly WS) at 3.
- The goal of the new circuit development project was to produce linear regulator, buck converter and buck controller products that do not make use of any Richtek confidential information. *Id.* at 21.
- In May 2010, uPI entered into agreements with outside contractor companies [] for the design of a number of integrated circuits. *Id.* at 4; RX-13C (agreement between uPI and []; RX-15C (agreement between uPI and [])
- uPI's agreement with [] required it to "perform[] the circuit designs and circuit simulation work" for a buck controller designated by the project number [] and a multiphase buck controller designated by the project number [] RX-240C (Kelly WS) at 4; RX-13C at UPIITC-ENF0012521-T.
- The agreement also required [] to "independently perform the design and development work under this contract according to the public information delivered by [uPI] or based on its knowledge and experience or the technical information obtained from the public market." RX-240C (Kelly WS) at 4; RX-13C at UPIITC-ENF0012522-T.
- A third company, [] provided layout services for the integrated circuits designed by [] Five layout engineers at [] coordinated their work with Doreena Liu at uPI. RX-240C (Kelly WS) at 4.
- uPI's agreement with [] required it to "perform circuit design, circuit simulation, and circuit layout" for a linear regulator designated

PUBLIC VERSION

as project [] and buck converters designated as projects [] *Id.* at 4-5; RX-15C at UPIITC-ENF0012610-T.

- The agreement required the [] engineer assigned to the project to “independently carry out design and development work of the products, [and] . . . not discuss the design and development content of the products with any [uPI] or [] engineers that are not responsible for the research and development of the products.” RX-240C (Kelly WS) at 4-5; RX-15C at UPIITC-ENF0012613-T.
- The following individuals were involved in product development with []

]

RDX-58C: Individuals involved in the new circuit development project

RX-240C (Kelly WS) at 6-7.

- Benjamin Tsai wrote the specifications for the outside designers. He has never worked for Richtek or worked on a technical project with Richtek engineers. *Id.* at 7-8.
- Stone Weng was project manager for some of the chips being replaced by the new circuit development project, but had no knowledge of those circuit designs. During the project, he had no contact with the outside circuit designers. *Id.* at 10.

PUBLIC VERSION

- Charles Chang created an entirely new symbol library for the [] schematic capture tool for the outside circuit designers' use. The library was based only on his personal experience, and not on Richtek information. Mr. Chang did not work or speak with anyone in the course of creating the symbol library. *Id.* at 10-11. Mr. Chang also created the ECS.ini file provided to the outside designers containing project configuration settings for [] without reference to other Richtek or uPI materials. *Id.* at 12.
- Doreena Liu coordinated the work of the outside layout engineers at [] Ms. Liu was given the design rules and the circuit schematics by Mr. Tsai. She discussed the project only with Mr. Tsai, Mr. Chou and the layout engineers at [] Ms. Liu has never worked for Richtek. *Id.* at 19.
- uPI implemented three measures to prevent Richtek confidential information from entering the engineering specifications and conceptual datasheets (the "specifications"). First, uPI chose an engineer, Ben Tsai, to write the specifications who had never worked for Richtek, was not a circuit designer, had never seen the circuit designs for the existing uPI products, and did not know any details of the circuit designs for the existing uPI products. Second, Mr. Tsai wrote specifications that only describe the functionality of the products and do not describe how to design the circuits or to create the layout. Third, Mr. Tsai created the specifications based on the needs and requirements communicated by uPI's customers, not simply as replacements for the existing products. *Id.* at 21.
- uPI also implemented measures to prevent Richtek confidential information from entering the base design of the new products through the development process itself. uPI hired outside developers to create the base design and layout, none of whom had any previous affiliation with Richtek or with uPI, and none of whom had access to Richtek or uPI integrated circuit designs or layouts. *Id.* at 21-22.
- The outside circuit designers used only the functional specification, publicly available documents and other materials created without reference to uPI or Richtek materials during the creation of the base designs. The symbol library and [] configuration file used by the outside circuit designers was created by Charles Chang, also without reference to uPI or Richtek materials. The outside circuit designers supervised the layout of their designs using their personal experience and publicly available documents. *Id.*; RX-129C (C. Chang ECS.ini file from university class)

PUBLIC VERSION

- The circuit designs were created at the outside circuit designers' offices, on their computer systems. The outside circuit designers did not have access to uPI's computer systems, and uPI personnel did not have access to the outside circuit designers' computer systems. RX-240C (Kelly WS) at 21-22.
- Mr. Tsai was the point of contact between uPI and the circuit designers. He personally answered all questions about the functional specifications. He also had conversations concerning bugs in the designs. When required for debugging or layout, Mr. Tsai arranged and monitored meetings between the outside circuit designers the relevant engineers at uPI. *Id.*
- The outside circuit designers at [] were not provided with any Richtek schematics or layouts, any uPI schematics or layouts, or any other confidential Richtek documents. *Id.*

Dr. Kelly's conclusion is that, "These steps were sufficient to prevent Richtek confidential information from being used to develop the productized versions of the [newly developed] designs and their revisions[.]" *Id.* at 22.

Thus, the evidence shows that uPI took steps to insulate its new product lines from any misconduct that took place in the past. uPI has satisfied all of the elements of the independent development defense, regardless of any similarities that its post-consent order designs may bear to Richtek's products. *See, e.g., Henry Hope*, 674 F.2d at 1341. Accordingly, the undersigned finds that none of uPI's newly developed products are the result of misappropriated Richtek trade secrets.

Richtek argues that uPI's newly developed accused products benefitted from Richtek trade secrets, despite uPI's efforts to isolate their development from any contact with former Richtek materials or employees. Compls. Br. at 63-67. The evidence shows that uPI took certain steps following the original investigation that were sufficient to ensure that its post-consent order products were not contaminated by unlawfully obtained

PUBLIC VERSION

material. Thus, uPI's newly developed products are not derived from Richtek trade secrets and thus do not violate the uPI consent order when imported or sold in the United States, unless shown to infringe an asserted patent.

Richtek alleges that "uPI's so-called independent development process for designing new products was a sham that uPI used to convince its United States customers that its new generation of products would be clear of Richtek's trade secrets." Compls. Br. at 63. In response to the consent order, uPI developed a detailed process that it identified as a "clean room procedure" for the development of new DC-DC controllers that do not infringe Richtek's intellectual property rights. This process is described in an opinion letter obtained from the law firm of Finnegan Henderson, Farabow, Garrett & Dunner, LLP. RX-36C (Finnegan opinion letter). The executive summary of the opinion letter reads as follows:

In our opinion, a court should find that uPI has exercised great care to implement procedures to ensure that the design of uPI's New Generation Products was completed without reliance upon any alleged trade secrets of Richtek. In the course of this analysis we have not relied on any identification [of] any particular alleged trade secrets of Richtek. Rather, we have relied upon uPI's recent conduct in hiring outside consultants with no relationship with uPI to perform the design of the New Generation Products. As these outside consultants have not had access to any Richtek's alleged trade secrets, we believe that a court should find that they could not have used Richtek's alleged trade secrets in the course of their design work. Furthermore, the uPI employees charged with overseeing this new design and implementing this new design in hardware also have had no access to Richtek's alleged trade secrets. Thus, we believe that none of Richtek's alleged trade secrets could have been used in the creation of the New Generation Products. In addition, so long as further iterations of the New Generation Products continue to be improved and revised by uPI employees without access to any of Richtek's alleged trade secrets, we are of the opinion that any further iterations based on the New

PUBLIC VERSION

Generation Products should also be free of any of Richtek's alleged trade secrets.

Id. at 1. As the summary makes clear, the Finnegan law firm audited the design of uPI's clean room *procedure*, not its ultimate implementation or the resulting products.

Richtek contends that the Finnegan opinion letter "is conclusory, unreliable and incompetent because uPI did not provide the authoring attorney with all the relevant and material information." Compls. Br. at 106 (citing JX-22C (Weinstein Dep. Tr.) at 38-42, 54-56, 67-70). Richtek, however, does not identify any information that uPI failed to provide to Finnegan, focusing instead on uPI's communications to its customers regarding the Finnegan opinion letter, communications that would have had no effect on Finnegan's analysis. *See Id.* at 63-64, 106. The undersigned finds that the Finnegan opinion letter is reliable evidence of the clean room procedure that uPI intended to follow.

Richtek's primary reason for asserting that uPI could not have followed the clean room procedures described in the Finnegan opinion letter is that uPI produced its new products within a comparatively short timeframe, "well shorter than any schedule for a similar project[.]" CX-11C-B (Corrected Walker WS) at 23-24, 88-89. Using the clean room procedure, outside design firms worked on a total of [] projects for uPI. *See* Compls. Br. at 65; CDX-407C (development timeline). The circuit design phase for these projects ranged from [] *See* Compls. Br. at 66; CDX-407C. At the end of each design phase, the outside designer provided uPI with a [] circuit design. Kelly Tr. 939; Huang Tr. 1010. Layout design and revisions to the circuit design then took another [] to complete. *See* CDX-407C.

PUBLIC VERSION

This timeframe is comparable to timetables that Richtek has followed in the past. Richtek employee James Liu testified, for example, that [] product took only [] to develop. Liu Tr. 158-60. Mr. Liu also testified that [] took [] to develop (Tr. 160), and that []

[] (Tr. 184-185). Thus, while some projects might take considerably longer, Richtek has developed products in the same approximate timeframe and with the same manpower as uPI. Accordingly, the undersigned finds that the development of uPI's newly accused products, while rapid, was within normal parameters for the industry. There is no reason, therefore, to conclude that the short timeframe alone is proof that uPI abandoned its clean room procedure and resorted to using Richtek trade secrets to develop its newly accused products.

Richtek argues that uPI's new circuit schematics include "verbatim copies of Richtek's designer notes or 'jottings' originally created in Richtek's [] circuit schematics (Trade Secret No. 11), notably the [] circuit blocks." Compls. Reply Br. at 33.

Dr. Walker testified that the [] is derived from an electronic copy of Richtek's [] circuit from the [] schematic. *Id.*; RX-242C (Min WS) at 49-50; CX-11C-B (Corrected Walker WS) at 43-48. Dr. Walker, however, does not present evidence supporting his assertion that the additional uPI products he identifies in his testimony contain the Richtek [] circuit. CX-11C-B (Corrected Walker WS) at 48. Dr. Walker also does not make clear which portion of Richtek's [] is purportedly contained in the portion of [] circuit he annotated. RX-242C

PUBLIC VERSION

(Min WS) at 50. No portion of the [] schematic is the same as Richtek's [] circuit. *Id.*; CX269C at UPIITC-ENF0039047; CX49C at RTK00003543. Dr. Walker testifies that notes associated with the various [] are found in both Richtek's [] schematic and the [] schematic. RX-242C (Min WS) at 50-51; CX-11C-B (Corrected Walker WS) at 44-47. However, the identified [] are not identical and they are provided on different circuitry (RX-242C (Min WS) at 51), a fact acknowledged by Dr. Walker on cross-examination. Walker Tr. 434-436. The [] further highlight similarity in terminology used by practitioners in the field and the differences between the [] schematic from Richtek's [] circuit schematic. RX-242C (Min WS) at 51.

Richtek has alleged that uPI misappropriated Richtek's [] circuit. CX-11C-B (Corrected Walker WS) at 59-72. The [] circuit is a comparator, which is a widely used circuit. RX-242C (Min WS) at 62-63. Similar circuits are found in public literature. *Id.* at 62-65; RPX-8C. Nearly all the circuits in Richtek's [] circuit schematic are available in the [] symbol provided with [] RX-242C (Min WS) at 63-65; RPX-8C. Dr. Walker provides no evidence or analysis of any of uPI's new products other than the [] product in support of the long list of uPI products (CX-11C-B (Corrected Walker WS) at 71-72) that he alleges include Richtek's circuit. *Id.* at 59-72.

Respondent's expert Dr. Min testified that the [] circuit schematic contains only publicly available information and common and widely practiced engineering techniques, and is well within the general knowledge, skills and know-how of persons in the industry who design DC-DC controllers. RX-242C (Min WS) at 63-66.

PUBLIC VERSION

Inasmuch as this circuit schematic is widely known, there is no basis to conclude that this circuit schematic was not independently developed by uPI. *Id.* at 65-66. The [] schematic is also not the same as the referenced Richtek schematic. There are differences in the names, attributes, connections, placements, and values among the compared circuit schematics, a fact acknowledged by Dr. Walker at the evidentiary hearing. *Id.*; CX-49C at RTK00003563; CX-269C at UPIITC-ENF0039036; Walker Tr. 439-440. While Richtek expert Dr. Walker opines that the directions [] are found on both schematics, these notes, which correspond to only a small portion of two different schematics, merely indicate common know-how among circuit designers. RX-242C (Min WS) at 66.

In summary, the evidence does not establish that uPI products developed after the consent order contain misappropriated Richtek trade secrets.

IX. Remedy

A. Modification of the Consent Order

The undersigned recommends a modification of the existing uPI consent order under 19 C.F.R. § 210.75(b)(4)(i) to reflect the fact that uPI has acquired new parent companies over the course of the enforcement proceeding.³³ [

]. *See*

³³ The consent order provides that “Enforcement, revocation, or modification of this Consent Order shall be carried out pursuant to Subpart I of Part 210 of Title 19, Code of Federal Regulations, and the Commission’s Rules of Practice and Procedure, which are hereby incorporated by reference.” JX-12 (uPI consent order) at 3. Subpart I allows modification of a consent order at the request of any person or on the Commission’s own initiative. Such modification is appropriate when required by “changed conditions of fact or law, or the public interest....” 19 C.F.R. § 210.76(a).

PUBLIC VERSION

JX-19C (Chang Dep. Tr.) at 215-220 (Jan. 3, 2012). On February 24, 2012, ASUSTek (aka ASUS) announced that it is purchasing a controlling 53-percent share of uPI [] CRX-51 (Taiwan stock exchange announcement); Chang Tr. 813-14, Cox Tr. 1083. [] (Chang Tr. 813), and the []].

In light of these new developments, it is recommended that uPI's consent order be modified to include the following language, in order to clarify that the consent order applies (and has always applied) to all uPI affiliates, past, present, or future:

A. Effective immediately upon the entry of this Consent Order, ***uPI and its affiliated companies, including but not limited to its parents, subsidiaries, affiliates and related companies,*** will not import into the United States, sell for importation into the United States, or sell or offer for sale in the United States after importation, or knowingly aid, abet, encourage, participate in, or induce importation into the United States, the sale for importation into the United States, or the sale, offer for sale, or use in the United States after importation, without the consent or agreement of Richtek, any DC-DC controllers or products containing same which infringe claims 1-11, 26, or 27 of U.S. Patent No. 7,315,190 ("190"), claims 29 or 34 of U.S. Patent No. 6,414,470 ("470"), or claims 1-3 or 6-9 of U.S. Patent No. 7,132,717 ("717"), or which are produced using or which contain Richtek's asserted trade secrets.

B. Civil Penalties

For the reasons set forth below, if uPI is found to have violated the consent order, it is recommended that the penalty should equal \$10,000 times the number of days on which an importation or sale occurred in violation of the consent order.

PUBLIC VERSION

1. Maximum Daily Penalty

Civil penalties are mandatory for violations of the Commission's cease and desist and consent orders issued under section 337. Subsection (f)(2) of section 337 provides that any person who violates a cease-and-desist or consent order issued by the Commission after it has become final:

shall forfeit and pay to the United States a civil penalty for each day on which an importation of articles, or their sale, occurs in violation of the order of not more than the greater of \$100,000 or twice the domestic value of the articles entered or sold on such day in violation of the order.

19 U.S.C. § 1337(f)(2); 19 C.F.R. § 210.75(b)(4)(ii). The legislative history of this provision suggests that the penalty of \$100,000 per day is intended for most violations, with the alternative penalty of twice the domestic value of the articles concerned limited to situations in which sales or importations on a given day exceed \$100,000 in value.³⁴

See Certain Erasable Programmable Read Only Memories, Inv. No. 337-TA-276

(Enforcement), Comm'n Op. at 28 (July 19, 1991) ("*EPROMs*"); *Magnets*, Inv. No. 337-TA-372, Comm'n Op. at 21 (Oct. 28, 1997). A daily penalty is also the Commission's

³⁴ The legislative history states in part:

The provision for a civil penalty of up to the amount of the domestic value of the articles entered, or sold, on a day in violation of the order is directed to the situation in which the violation may involve a large shipment of an article of sufficient value so as to make a \$10,000 [the original maximum] penalty not a deterrent to the violation of the order. The Commission would exercise the discretionary authority provided with respect to deciding upon the appropriate size of any penalty under this section so as to insure the deterrent effect of its order while taking into account such factors as intentional versus unintentional violations and the public interest.

H.R. Rep. 317, 96th Cong., 1st Sess. 191 (1979); S. Rep. 249, 96th Cong., 1st Sess. 262 (1979).

PUBLIC VERSION

preference. *Certain Ink Cartridges and Components Thereof*, Inv. No. 337-TA-565 (Enforcement), Enforcement Initial Det. at 67 (Apr. 17, 2009) (“The Commission has indicated a preference for a daily penalty, as opposed to a penalty based on the domestic value of the infringing articles, ‘unless the domestic value of the articles sold on a given day makes the daily maximum insufficient to serve as a deterrent to violation.’”) (quoting *Magnets* at 21).

The maximum daily penalty in this case should be the default value of \$100,000 rather than a calculated amount based on domestic value. There is insufficient record evidence to determine the “domestic value” of the downstream products that form the bulk of the imports and sales in this proceeding. While uPI’s sales prices to its foreign distributors are available, the record does not contain substantial evidence of the invoice values of downstream products containing accused uPI chips at the relevant time, *i.e.*, when they were sold for importation into the United States. A \$100,000 maximum daily penalty would be sufficient to act as a deterrent to any future violations. *See Certain Ink Cartridges and Components Thereof*, Inv. No. 337-TA-565 (Enforcement), Enforcement Initial Det. at 67 (Apr. 17, 2009) (“[D]aily penalties, rather than value-based penalties, should be assessed unless the \$100,000 daily maximum is insufficient.”).

2. The Six-Factor EPROMs Test

The undersigned finds that it would not be appropriate to impose the maximum penalty in this case. The Commission has the discretion to impose a civil penalty that is appropriate to the circumstances, “so as to insure the deterrent effect of its orders while taking into account such factors as intentional versus unintentional violations and the public interest.” *EPROMs*, Comm’n Op. at 29 (quoting H.R. Rep. 317, 96th Cong., 1st

PUBLIC VERSION

Sess. 191 (1979)). When calculating a proportional penalty, the Commission considers a number of factors: “(1) the good or bad faith of the respondent; (2) any injury due to the infringement; (3) the respondent’s ability to pay the assessed penalty; (4) the extent to which the respondent benefitted from its violations; (5) the need to vindicate the authority of the Commission; and (6) the public interest.” *Ninestar Tech. Co. Ltd. v. International Trade Comm’n*, Slip Op. No. 2009-1549 at 9 (Fed. Cir. Feb. 8, 2012) (affirming *Certain Ink Cartridges and Components Thereof*, Inv. No. 337-TA-565, Comm’n Op. at 17-18 (Sept. 24, 2009)); *EPROMs*, Comm’n Op. at 23-24, 26. This six-factor test takes into account “the three overarching considerations enumerated by Congress in the legislative history [of section 337(f)(2)], viz., the desire to deter violations, the intentional or unintentional nature of any violations, and the public interest.” *San Huan New Material High Tech, Inc. v. Int’l Trade Comm’n*, 161 F.3d 1347, 1362 (Fed. Cir. 1998).

Inasmuch as uPI made certain voluntary efforts to meet the terms of the consent order, a proportional penalty should be considerably less than the maximum amount but not an insignificant amount. “The degree to which a respondent takes steps on its own initiative to assure compliance affects the judgment as to what penalty is necessary to induce a sufficiently vigilant posture.” *San Huan*, 161 F.3d at 1362 (quoting *EPROMs Enforcement Op.*).

a. Good Faith

There is evidence that uPI made considerable good faith efforts to comply with the consent order, including obtaining opinion letters from counsel, CX-803C (Finnegan Henderson opinion letter re clean room procedures); CX-1062C (Perkins Coie opinion letter re noninfringement); obtaining contractual agreements from distributors not to ship

PUBLIC VERSION

uPI's formerly accused products or products containing them to the United States, RX-45C to RX-48C (Taiwanese distributor agreements); RX-66C (additional distributor agreements, including [] monitoring the distributors' sales to ensure compliance;³⁵ setting up a "new circuit development project" designed to remove the influence of misappropriated trade secrets on later-developed product lines, *see* RX-240C (Kelly WS); and terminating all U.S. sales activities (including termination of uPI's only U.S. sales representative), *see* RX-108C (Pinelli Decl.). These voluntary efforts demonstrate "a sufficiently vigilant posture" to justify a considerable reduction in any daily penalty imposed. *See San Huan*, 161 F.3d at 1362.

b. Benefit to uPI

When appropriately calculated, the benefit to uPI from sales in violation of the consent order is significantly less than that alleged by Richtek. Compls. Br. at 114-15.

Inasmuch as all or nearly all of [

]. *See* Resp. Br. at 102-03; RX-1518C (Prowse WS) at 23, 28-29.

For sales of downstream products, Richtek's expert, Dr. Alan Cox, calculated the benefit to uPI from the sales of downstream products that were imported or sold into the United States after the signing of the uPI consent order. CX-5C (Cox WS) at 27-39

³⁵ [

] RPX-9C to RPX-21C. uPI

[

] RX-237C

(Ko WS) at 3, 5.

PUBLIC VERSION

(benefit from sales of [] downstream products); CX-2371C (Cox 2nd. Supp. WS) at 1-2 (benefit from [] sales); *see* CDX-1015C to CDX-1016C (benefit from [] sales); CDX-111C to CDX-112C (benefit from [] sales); CDX-116C to 117C, CDX-1000C (benefit from [] sales); CDX-1005C to CDX-1006C (benefit from [] sales); CDX-1010C to CDX-1013C (benefit from [] sales); CDX-1050C to CDX-1051C (benefit from [] sales). He summarized these benefits in CDX-1052C, which shows uPI's gross profit from sales of downstream products, based on the data received from third-party downstream customers. CX-2371C (Cox 2nd. Supp. WS) at 2; CDX-1052C (revised estimated benefit incorporating [] data); *see* CX-5C (Cox WS) at 47; CDX-1045 (original estimated benefit to uPI).

While gross profit is a suitable indicator of the benefit accruing to uPI from sales of downstream products in the United States, a number of adjustments to Dr. Cox's figures are necessary to make them wholly accurate. First, the parties disagree as to the average time in inventory between uPI's sale of an accused chip to a downstream customer and the U.S. sale of the downstream product containing that chip. Richtek relies on a declaration by Yenju Wang, a former marketing manager at Richtek USA, [

] CX-5C (Cox WS) at 31; Complaint, Ex. 66 (Decl. of Y. Wang).

In contrast, uPI's expert, Dr. Stephen Prowse, analyzed the actual manufacturing codes for uPI chips embedded in the downstream products that Richtek submitted to the

PUBLIC VERSION

Commission with its enforcement complaint and testified that while there was a wide range of times in inventory, the average time lag for the products on which the complaint was based was [] days. RX-1518C (Prowse WS) at 31-32; RDX-240C (estimated time elapse analysis). Inasmuch as uPI's estimate is based on actual data in the record rather than on a rough estimate, the better estimate for time in inventory is [

] Accordingly, it is reasonable to assume that a uPI chip sold in violation of the consent order on August 13, 2010 would not appear in a downstream product in the United States until approximately [] See RX-1518C (Prowse WS) at 36-37, 42-43, 45, 64, 80. Downstream sales before that date could not contain uPI chips that violate the consent order, and therefore should be excluded from the calculation of any unlawful benefit accruing to uPI.

Second, Dr. Cox based his calculation of the benefit accruing to uPI in part on a calculation of uPI's gross profit margin for the entire 2010 calendar year. The undersigned agrees with Dr. Prowse that given the significant impact of the consent order on uPI's DC-DC controller business,³⁶ the gross margin should be calculated based on the post-consent order period only: August 13, 2010 through December 31, 2010. See RX-1518C (Prowse WS) at 37-38, 40, 43, 66, 80-81.

Third, Dr. Cox included in his analysis sales of products shipped to Canada, on the grounds that the billing addresses for those sales were located in the United States. CX-5C (Cox WS) at 42, 44-46. The products that never enter the United States are

³⁶ There is evidence that [

]. RX-1518C (Prowse WS) at 18.

PUBLIC VERSION

outside the *in rem* jurisdiction of the Commission, and should be excluded from consideration. The same is true for any products shown only to have entered a foreign trade zone en route to a foreign destination without ever being delivered to a destination in the United States. *See* RX-1518C (Prowse WS) at 45-46.

Finally, Dr. Cox's analysis includes the many downstream sales that did not violate Richtek's intellectual property rights because they were made with Richtek's consent pursuant to one or more of the [] agreements described above.

Respondent's expert Dr. Prowse testified to the effect that the aforementioned adjustments would have on the estimated benefit accruing to uPI from downstream sales in violation of the consent order. He testified that the recalculated estimated gross profit accruing to uPI is no more than [] RX-1518C (Prowse WS) at 82-84; RDX-304C (summary of adjustments to Dr. Cox's estimated benefit to uPI). This figure is based on Dr. Cox's calculations, with adjustments discussed above, but without adjusting for the number of downstream sales made pursuant to a [] agreement with Richtek. *Id.* Inasmuch as in each case the number of sales not covered by a [] agreement is only a fraction of the total number of downstream sales, the true benefit accruing to uPI from violations of the consent order is only a fraction of Dr. Prowse's estimate. RX-1518C (Prowse WS) at 38-39, 43-44, 48-49, 50-52, 70-78; RDX-235C (adjusted calculation for [] sales); RDX-237C & RDX-297C (adjusted calculations for [] sales); RDX-298C (adjusted calculation for [] sales); RDX-303C (adjusted calculation for [] sales).

PUBLIC VERSION

**Benefit to uPI from U.S. Sales of Downstream Products Not Covered
by a Settlement Agreement After Entry of the uPI Consent Order**

uPI Customer	Calculated Benefit with Dr. Prowse's Adjustments		# Models Sold in United States		# Not Covered by an Agreement		Adjusted Benefit	
	(a)	Source	(b)	Source	c)	Source	(d) = (c)/(b)	(e) = (a)*(d)
[[CDX-1015C; CDX-1016C	[CDX-141C	[RX-1518C	[[
		RDX-235C		CDX-133C		RDX-250C		
		RDX-237C; RDX-297C		CDX-135C		RDX-251C		
		RDX-298C		CDX-137C		CDX-137C		
		RDX-303C		CDX-139C		RX-180C		
		CX-2356C		CX-2349C		CX-2349C; RX-167C		
]]	CX-2371C]	CX-2372C]	CX-2374C; RX-167C]]
TOTAL:							[]

c. Injury to Richtek

Richtek has not proven that it was significantly injured by any of the shipments at issue. Dr. Cox's analysis of the potential harm to Richtek is speculative and unsupported by reliable evidence. For example, the harms to Richtek that he identifies include:

(1) increased competition for future reference designs; (2) a reduced return if plans to hire additional managers, account executives, and engineers at Richtek USA proceed; and

PUBLIC VERSION

(3) increased difficulty in hiring sales personnel due to possible reduced commissions on worldwide sales. CX-5C (Cox WS) at 53-54. All refer to potential future events and are not based on reliable evidence of actual harm. Richtek has not established that it is suffering any current, ongoing harm caused by sales of downstream products containing accused uPI chips.

d. Ability to Pay

uPI is a profitable company that earned a gross profit of [] over the twelve-month period ending on June 30, 2011, which was [] percent of its total net revenue for the period. CX-5C (Cox WS) at 56-57. Nevertheless, “uPI has substantial and ongoing commitments for operational expenses such as general and administrative expenses, selling expenses and research and development expenditures that all are necessary for uPI to maintain its business.” RX-1518C (Prowse WS) at 25. There is evidence that uPI’s *operating* profit after taking such expenses into account has declined following the entry of the consent order and was only [] for the period from January through June 2011. *Id.*; Prowse Tr. 922.

Given uPI’s lost sales and the expense of the “clean room procedure” followed in developing new product lines, uPI’s ability to pay any substantial penalty has already been compromised by its attempts to comply with the consent order. *See* RX-1518C (Prowse WS) at 18 (“significant costs to uPI in terms of out-of-pocket expenses, lost customers, lost sales, lost market share, lost revenues and lost profits.”). The clean room procedure alone cost uPI [] NT dollars. RX-236C (Huang WS) at 50. There is evidence that in total “uPI incurred lost sales amounting to more than [] lost profits of [] and incurred out of pocket expenses of more than [] as a

PUBLIC VERSION

result of its efforts to comply with the consent order. RX-1518C (Prowse WS) at 19. This is offset, however, by ASUSTek's recent acquisition of a controlling interest in uPI for \$11 million, putting the value of uPI at over \$30 million. CRX-51 (Taiwan stock exchange announcement); Cox Tr. 1083-1084. ASUS itself had revenues of approximately \$4.5 billion in the first half of 2011, with about \$700 million available in cash. Cox Tr. 1084-1085; CRX-52 (ASUSTek Financial Statements). The record does not indicate, however, whether ASUS has agreed to indemnify uPI for any litigation losses. The totality of the evidence suggests that uPI's own assets are somewhat limited, but that a civil penalty in proportion to the extent of the violation found would be within uPI's ability to pay.

e. Other Factors

The remaining *EPROMs* factors also weigh in favor of a reduced, proportionate civil penalty. The need to vindicate the authority of the Commission is a serious concern, and the act of imposing a civil penalty on even *de minimis* imports and sales that violate a Commission order is an effective confirmation of the Commission's authority. Furthermore, there is no evidence that imposing a civil penalty in proportion to the number of violations days would raise any public interest concerns.

3. Conclusion

Accordingly, although a civil penalty should be imposed if a violation is found, the amount of the daily penalty should be considerably less than the maximum penalty, on the order of 10 percent of the maximum penalty, or \$10,000 per day of violation of the relevant consent order. As discussed in detail in the Importation section, there is

PUBLIC VERSION

evidence of a maximum of 75 days “on which an importation of articles, or their sale, occur[red] in violation of the order.” Shown below is a summary chart of the number of violation days.

Days in Violation

Seller	Days in Violation	Source
[]	1	RX-237C at 7; RX-68C
[]	21	CDX-141C at 5-6
[]	10	RX-1518C at 99
[]	0	CDX-135C; RDX-251C
[]	0	CDX-137C; RX-1380C
[]	43	CDX-139C
[]	0	CX-2349C; RX-167C
[]	0	CX-2374C; RX-167C
TOTAL	75	

See 19 U.S.C. § 1337(f)(2). Thus, the recommended total civil penalty is \$750,000.

This amount would eliminate any benefit that uPI may have received from downstream sales in violation of the consent order and would be a powerful deterrent to ensure a “sufficiently vigilant posture” towards complying with the consent orders in the future. See *San Huan*, 161 F.3d at 1362.

C. Exclusion Order

The Commission may also determine to revoke the uPI consent order and direct that the articles concerned be excluded from entry into the United States. 19 C.F.R. § 210.75(b)(4)(iii). A limited exclusion order issued under this rule would necessarily be directed to uPI, the only remaining named respondent in this enforcement proceeding. See, e.g., *Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same*, Inv. No. 337-TA-605, Initial Det. on Violation & Recommended Det. on Remedy & Bond at 123-25 (Dec. 1, 2008) (post-*Kyocera*, any limited exclusion order

PUBLIC VERSION

covering downstream products must be limited to those downstream products imported by named respondents).

An order excluding articles from entry into the United States may be either limited, directed against products imported by persons found in violation, or general, directed against all infringing products. 19 U.S.C. § 1337(d). Section 337(d)(2) provides that the Commission shall issue a limited exclusion order directed to the articles of named respondents to the investigation unless at least one of two special circumstances are shown to exist:

The authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that—

(A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons; or

(B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products.

19 U.S.C. § 1337(d)(2); *see, e.g., Kyocera Wireless Corp. v. International Trade Comm'n*, 545 F.3d 1340 (Fed. Cir. 2008).

Although Richtek named only uPI and Sapphire as respondents in this enforcement proceeding, and has [] agreements with [] that allow those third parties to continue importing and selling certain products containing accused uPI controllers, Richtek now seeks a general exclusion order. Compls. Br. at 96-103. Richtek's proposed remedy is overbroad, as Richtek has not met its burden of proof that either of the above two statutory exceptions is present in this proceeding.

PUBLIC VERSION

Richtek has not alleged any set of circumstances that would demonstrate that a general exclusion order is necessary to prevent circumvention of a limited order directed to products sold or imported by uPI and containing uPI DC-to-DC controllers. Nor is there evidence that it is difficult to identify the source of infringing products, which are marked with codes indicating both the source and the date of manufacture. *See* CPX-1 to CPX-62 (physical exhibits); CX-471 to CX-529 (excluding withdrawn exhibits) (product photos).

Therefore, any exclusion order issued in this proceeding would necessarily be limited to DC-to-DC controllers and products containing the same imported, sold for importation, or sold after importation to the United States by uPI. Inasmuch as uPI has made efforts to comply with the consent order, a limited exclusion order would provide no more of a remedy than the current consent order already provides. The undersigned recommends that the Commission retain the existing consent order, with the modification discussed above, rather than replacing it with a limited exclusion order.

D. Cease and Desist Order

In addition to, or in lieu of, an exclusion order, the Commission may issue cease and desist orders to respondents found to be violating Section 337. 19 U.S.C. § 1337(f). Cease and desist orders operate as a backup to and a reinforcement of an exclusion order. In this case, even if the consent order were revoked and an exclusion order issued, a cease and desist order would still be inappropriate because uPI is a foreign company with no operations or agents holding inventory of accused products in the United States. Resp. Br. at 119; Staff Br. at 112; Compls. Br. at 104 (citing no evidence in requesting a cease and desist order). *Certain Agricultural Tractors*, Inv. No. 337-TA-380, Comm'n Op. at

PUBLIC VERSION

31, USITC Pub. 3026 (Mar. 1997); *see also Certain Cigarettes*, Inv. No. 337-TA-424, Comm'n Op. at 10, USITC Pub. 3366 (Nov. 2000). There is no evidence that uPI maintains any inventories of DC-DC controllers or downstream products within the United States. Compls. Br. at 104 (citing no evidence in requesting a cease and desist order).

X. Conclusions

1. The Commission has subject matter, personal, and *in rem* jurisdiction in this proceeding.
2. The importation requirement is satisfied.
3. Respondent violated the consent order issued at the conclusion of Inv. No. 337-TA-698 on August 13, 2010.
4. Enforcement measures are appropriate for violation of the consent order.
5. The recommended civil penalty is \$750,000.

XI. Enforcement Initial Determination and Order

It is the administrative law judge's ENFORCEMENT INITIAL DETERMINATION (EID) that the enforcement respondent violated the consent order issued at the conclusion of Inv. No. 337-TA-698 on August 13, 2010. It is also the administrative law judge's recommendation that enforcement measures are appropriate for violation of the consent order which measures are set forth in the Conclusions of this EID.

Further, this EID, together with the record of the hearing in this proceeding consisting of (1) the transcript of the hearing, with appropriate corrections as may

PUBLIC VERSION

hereafter be ordered, and (2) the exhibits received into evidence in this proceeding, is CERTIFIED to the Commission.


In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

The Secretary shall serve a public version of this EID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order, as amended, issued in this proceeding.

To expedite service of the public version, each party is hereby ORDERED to file with the Commission Secretary by no later than June 22, 2012, a copy of this EID with brackets that show any portion considered by the party (or its suppliers of information) to be confidential, accompanied by a list indicating each page on which such a bracket is to be found. At least one copy of such a filing shall be served upon the office of the undersigned, and the brackets shall be marked in red. If a party (and its suppliers of information) considers nothing in the EID to be confidential, and thus makes no request that any portion be redacted from the public version, then a statement to that effect shall be filed.

PUBLIC VERSION

Notwithstanding Commission rule 210.75(b)(3), the EID shall become the Commission's final determination on violation 60 days after service of the EID, unless the Commission orders review of the EID or changes the deadline for determining whether to review it. Comm'n Order (Aug. 30, 2011).

A handwritten signature in black ink, appearing to read "David P. Shaw", written over a horizontal line.

David P. Shaw
Administrative Law Judge

Issued: June 8, 2012

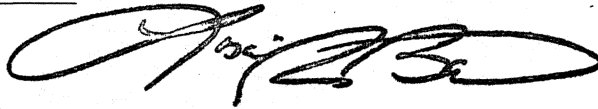
**CERTAIN DC-DC CONTROLLERS AND
PRODUCTS CONTAINING THE SAME**

**337-TA-698
Enforcement Proceeding**

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ENFORCEMENT INITIAL DETERMINATION** has been served by hand upon the Commission Investigative Attorney, **Lisa A. Murray, Esq.**, and the following parties as indicated, on

NOV 30 2012



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