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**NON-CONFIDENTIAL**

No. 2010-1176

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In The  
**United States Court of Appeals  
for the Federal Circuit**

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TESSERA, INC.,

Appellant,

v.

INTERNATIONAL TRADE COMMISSION,

Appellee,

and

ELPIDA MEMORY, INC. and ELPIDA MEMORY (USA) INC.

Intervenors,

and

SMART MODULAR TECHNOLOGIES, INC.,

Intervenor,

and

ACER, INC., ACER AMERICA CORPORATION, NANYA TECHNOLOGY  
CORPORATION, NANYA TECHNOLOGY CORPORATION U.S.A.,  
and POWERCHIP SEMICONDUCTOR CORPORATION,

Intervenors,

and

**FILED**  
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RAMAXEL TECHNOLOGY LTD.,

Intervenor,

and

KINGSTON TECHNOLOGY COMPANY, INC.,

Intervenor.

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On appeal from the United States International Trade Commission in  
Investigation No. 337-TA-630

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**NON-CONFIDENTIAL BRIEF FOR INTERVENORS ACER, INC.,  
ACER AMERICA CORPORATION, NANYA TECHNOLOGY  
CORPORATION, NANYA TECHNOLOGY CORPORATION U.S.A.,  
AND POWERCHIP SEMICONDUCTOR CORPORATION**

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Powerchip Semiconductor Corporation

July 20, 2010

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## CERTIFICATE OF INTEREST

Pursuant to Fed. Cir. Rule 47.4, counsel for Intervenor (these parties are in support of Appellee) Acer Inc.; Acer America Corp.; Nanya Technology Corporation; Nanya Technology Corporation U.S.A.; and Powerchip Technology Corporation, certifies the following:

1. The full name of every party or amicus represented by the undersigned are:

Acer Inc.; Acer America Corp.; Nanya Technology Corporation; Nanya Technology Corporation U.S.A.; and Powerchip Technology Corporation (collectively "ANP")

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by the undersigned are:

Acer Inc.; Acer America Corp.; Nanya Technology Corporation; Nanya Technology Corporation U.S.A.; and Powerchip Technology Corporation (collectively "ANP")

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by the undersigned are:

Acer America Corp. is a wholly owned subsidiary of Acer Inc. and Nanya Technology Corporation U.S.A. is a wholly owned subsidiary of Nanya Technology Corporation

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

**ORRICK, HERRINGTON & SUTCLIFFE, LLP**

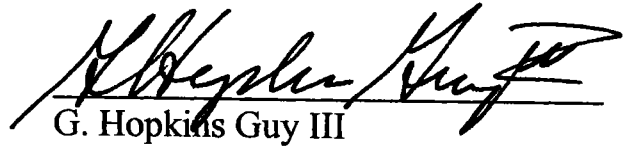
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Respectfully submitted,

  
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**COMMISSION DECISIONS**

*Certain Semiconductor Chips With Minimized Chip Package Size And  
Products Containing Same, Inv. 337-TA-630, Initial Det'n on Violation,  
2009 WL 3092628 (U.S.I.T.C. Aug. 28, 2009).....4*

*Certain Semiconductor Chips With Minimized Chip Package Size And  
Products Containing Same, Inv. 337-TA-630, Comm'n Opinion,  
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## STATEMENT OF RELATED CASES

U.S. Patent Nos. 5,679,977 and 6,133,627 are related to U.S. Patent Nos. 5,852,326 and 6,433,419. U.S. Patent No. 5,663,106 incorporates by reference U.S. Patent No. 5,148,265, which is the parent of the '326, and '419 Patents. The '326 and '419 Patents are at issue in *Spanision, Inc. v. Commission*, Nos. 09-1460, -1461, -1462 & -1465, currently pending before this Court before Judges Friedman, Lourie, and Linn.

The '977, '627, '326 and '419 Patents are being asserted by Tessera in *Siliconware Precision Industries Co. et al. v. Tessera, Inc.* No. C08-03667-CW (N.D.Cal.). One or more of the '977, '627, and '106 Patents are at issue in other pending district court cases, including *Tessera, Inc. v. A-DATA Technology Co.*, 2:07-CV-534 (E.D.Tex.); *Tessera, Inc. v. Advanced Micro Devices, Inc.*, C05-04063-CW (N.D. Cal.); *ChipMOS Technologies Inc. v. Tessera, Inc.*, No. C08-03827-CW (N.D. Cal.); and *Advanced Semiconductor Engineering Inc. et al. v. Tessera, Inc.* No. C08-03726-CW (N.D. Cal.). All of these cases are presently stayed.

## STATEMENT OF JURISDICTION

Tessera states that the final determination of Appellee U.S. International Trade Commission (“Commission”) is reviewable under 28 U.S.C. § 1295(a)(6). Intervenor ANP agree, except as to the ITC’s determination that there was no violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) by ANP products that are subject to patent exhaustion. Tessera’s appeal of that portion of the Commission’s determination was untimely. This Court therefore does not have jurisdiction over this aspect of Tessera’s appeal. F. R. A. P. 4(a)(1)(B).

## STATEMENT OF ISSUES PRESENTED

1. Is there substantial evidence in the record to support the Commission's factual findings that in the accused wBGA devices, the substrate core corresponds to the "top layer" as claimed in the '106 patent – and that the solder mask, in whole or in part, is not the "top layer" – and therefore the accused wBGA devices do not infringe?
2. If the finding by the Commission that the claim term "top layer" cannot include the solder mask is treated as a claim interpretation, does the record support the Commission's construction?
3. Should the Commission's factual findings that the accused  $\mu$ BGA products and wBGA devices do not infringe the '977 and '627 Patents be vacated?
4. Is there substantial evidence in the record to support the Commission's determination that there was patent exhaustion?

## STATEMENT OF THE CASE

Tessera filed an ITC Complaint accusing Intervenors Acer, Inc., Acer America Corporation, Nanya Technology Corporation, Nanya Technology Corporation U.S.A. and Powerchip Semiconductor Corporation (“ANP”) of violating § 337 of the Trade Act, 19 U.S.C. § 1337, by infringing the 5,663,106, 5,679,977 and 6,133,627 Patents, which relate to semiconductor packages. JA0004137-69. ANP answered the Complaint, stating that the Asserted Patents were not infringed, and raised defenses of, *inter alia*, patent exhaustion and patent invalidity. The Commission found that ANP do not infringe any of the Asserted Patents. The Commission also found that all accused products that ANP purchased from licensed entities were authorized to be sold by Tessera and Tessera’s rights in those chips became subject to exhaustion. The ITC accordingly found no violation of § 1337. *Certain Semiconductor Chips With Minimized Chip Package Size And Products Containing Same*, Inv. 337-TA-630, Comm’n Opinion, 2010 WL 686377 (U.S.I.T.C. Feb. 24, 2010)(JA0000001-44); *see also id.*, Initial Det’n On Violation, 2009 WL 3092628 (U.S.I.T.C. Aug. 28, 2009)(JA0000054-235).

## INTRODUCTION

Seeking to reduce its burden on appeal, Tessera challenges the Commission's conclusion of noninfringement under the guise of claim construction which it wrongly asserts deserves *de novo* review. This challenge fails since Tessera obtained its preferred claim construction on key terms, particularly for the term "top layer"—"a layer disposed on the active side of the chip and which carries the terminals" — and cannot identify a finding of fact, on which the Commission's noninfringement finding rests, not supported by substantial evidence. In advancing this approach, Tessera literally ignores overwhelming evidence supporting the Commission's non-infringement finding, and instead invites this Court to conduct *de novo* review of that factual finding. The Court should decline this improper invitation.

The Commission, affirming the ALJ, found that the laminate substrate core of the wBGA packages is the "top layer," and therefore, necessarily, that the laminate substrate core "carries" the terminals. Tessera never challenges this finding. Instead, Tessera proffers two alternative infringement theories that require the "top layer" to either be, or to incorporate, a solder mask. Tessera's alternatives are factual issues for the fact finder, not for this Court, and there is no basis for a remand because there is no record support for Tessera's theories. All record evidence rejects the possibility of the solder mask "carrying" the terminals; there is

likewise no record support for treating the solder mask and substrate core as a single layer, and such a structure would in any case not have the terminals “thereon,” but within.

## STANDARD OF REVIEW

### A. Findings Of Fact

Pursuant to the Administrative Procedure Act, the Court reviews factual determinations from the International Trade Commission for “substantial evidence.” 19 U.S.C. § 1337(c); 5 U.S.C. § 706(2)(E).

[T]he substantial evidence standard does not allow a court to conduct a *de novo* investigation of the evidence on the record before it to reach an independent conclusion; rather, the court’s review is limited to deciding whether there is sufficient evidence in the record considered as a whole to support the agency’s findings.

*Akzo N.V. v. Int’l Trade Comm’n*, 808 F.2d 1471, 1479 (Fed. Cir. 1986). If the record as a whole contains substantial evidence to support the factual finding, the Court must affirm the Commission’s decision. *Kinik Co. v. Int’l Trade Comm’n*, 362 F.3d 1359, 1366 (Fed. Cir. 2004).

“Substantial evidence” is “more than a mere scintilla,” but “something less than the weight of the evidence.” *Yingbin-Nature (Guangdong) Wood Industry Co., Ltd. v. Int’l Trade Comm’n*, 535 F.3d 1322, 1335 (Fed. Cir. 2008). It is no more than the evidence necessary to defeat a motion for a directed verdict. *Kay v. FCC*, 396 F.3d 1184, 1188 (D.C. Cir. 2005). The “possibility of drawing two

inconsistent conclusions from the evidence does not prevent an administrative agency's finding from being supported by substantial evidence." *Yingbin*, 535 F.3d at 1335. The Court affirms a finding of non-infringement supported by substantial evidence even if it disagrees with the Commission's analysis or the reasoning behind its determination. *Am. Hosp. Supply Corp. v. Travenol Laboratories, Inc.*, 745 F.2d 1, 10 (Fed. Cir. 1984).

#### **B. Conclusions Of Law**

The Court reviews questions of law *de novo*. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995).

### **BACKGROUND OF THE PROCEEDINGS**

#### **A. Initial Determination By The ALJ**

The ALJ determined that neither the  $\mu$ BGA products nor the wBGA devices infringe the asserted claims of the '106 patent. JA0000110-11. The ALJ further found that none of the accused products infringed the '977 patent or the '627 patent. JA0000138.

Regarding the '106 patent, the ALJ interpreted the term "top layer" to mean "an outer layer of the chip assembly upon which the terminals are fixed," and found that the claimed "top layer" corresponded to the substrate core of the accused devices. JA0000083; JA0000109. In so holding, the ALJ expressly

rejected that the solder mask is the “top layer” and implicitly found that the terminals were not “on or upon” or “fixed” to the solder mask. JA0000109.

{

} JA0000212.

**B. Commission Opinion**

At Tessera’s request, the Commission reviewed and then revised the ALJ’s claim construction of terms “top layer” and “thereon.” The Commission revised two aspects of the ALJ’s construction of “top layer.” It discarded the “outer layer” language as overbroad, and deemed the restriction to a “single layer” unsupported, concluding instead that the “top layer” can be composite or multi-tiered.

JA0000019-21.

Importantly, however, the Commission did *not* reverse the ALJ’s finding that the terminals are “fixed” to the “top layer,” although the Commission expressed the relationship in slightly different terms – namely – that the top layer is that which “*carries* the terminals.” JA0000019-21 (emphasis added).

The Commission likewise modified the ALJ's construction of "thereon."  
JA0000021. The Commission concluded that "thereon" also encompasses locating terminals on *surfaces* of the top layer other than the top surface, "such as the bottom or side *surfaces*." JA0000022 (emphasis added). Notably, the Commission adopted the ALJ's rejection of Tessera's arguments that the terminals are on the bottom layer of the solder mask. JA0000109. This finding of fact has not been challenged by Tessera.

The Commission further adopted the ALJ's finding that the "terminals" are the solder ball pads, which, though formed from and connected to the copper leads (also referred to as "wires," "traces" and the copper "metallization layer"), are distinct from it, and of different composition. JA0000084; JA0000108-09.

Applying the claims as construed to the accused devices, the Commission found that the accused wBGA devices did not infringe the '106 patent. {

} JA0000028-29.

The Commission upheld the ALJ's finding of non-infringement for all products with respect to the '977 and '627 patents.

The Commission declined to review the ID with regards to patent exhaustion, thereby adopting the ALJ's findings. 19 C.F.R. § 210.42(h)(2); JA00000051-52. The Commission further adopted the entirety of the ALJ's ID to the extent that it was not inconsistent with its opinion, and like the ALJ, found no violation under section 337. JA00000003.

### **STATEMENT OF FACTS**

#### **A. ANP Intervenorors**

The Intervenorors in this appeal are all, except one, in the business of selling and/or manufacturing DRAM components and/or DRAM memory modules. JA00000064-67. Tessera's claims relate to the plastic packaging of ICs or "integrated circuits." None of the Intervenorors actually perform any packaging operations. Instead, they utilize packaging subcontractors for packaging services.

{

} JA0000198-212.

#### **B. The Asserted Patents**

##### **1. The '106 Patent**

Semiconductor packages protect delicate ICs from mechanical and thermal damage. JA00000810 (col. 1, ll. 24-27); JA141363 (col. 1, ll. 17-39); JA154417-26; JA154428-29. A component of semiconductor packages is "encapsulant," usually a molded epoxy applied around the IC and other package components to protect

them from damage. JA0000810 (col. 2, ll. 27-33); JA141367-69 (col. 10, l. 63-col. 11, l. 13; col. 14, ll. 49-52). When applied through certain techniques such as injection molding, encapsulant may come into contact with, and thereby contaminate, the electrical terminals. JA0000810 (col. 1, ll. 27-33); JA0142968-69. External electrical connections to terminals obstructed by encapsulant can be rendered unreliable or ineffective, resulting in malfunctioning packages. JA0000810 (col. 1, ll. 27-33); JA0142967-71.

The '106 patent is directed to a method of preventing contamination of exposed terminals on semiconductor assemblies during injection molding through the use of a "protective barrier" that comes in contact with the "top layer" and protects the terminals from the encapsulant. JA0142783-84. Figure 1 from the '106 patent is reproduced below for reference.

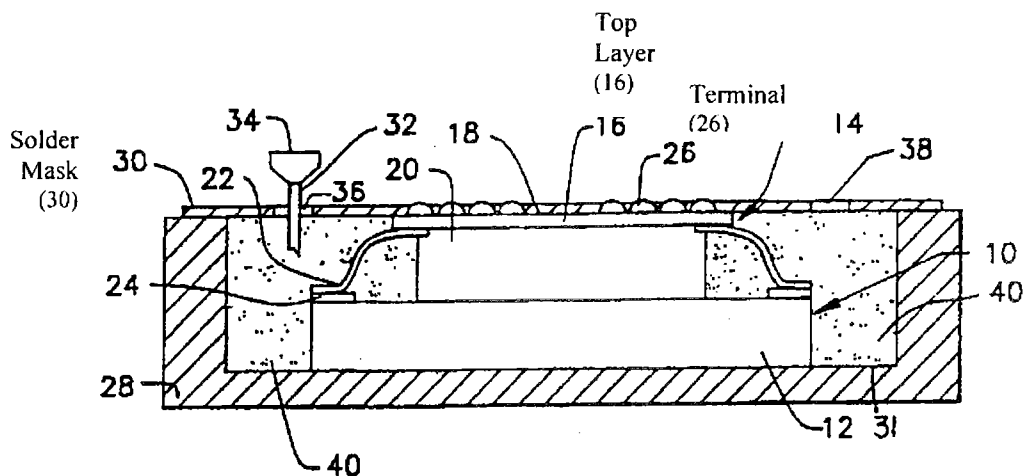


FIG. 1

JA0000805, Fig. 1

Illustrative of this method is Claim 1:

1. A method of encapsulating a semiconductor chip assembly *having a top layer with an array of exposed terminals thereon*, the terminals being electrically connected to the chip, said method comprising the steps of:

placing an encapsulant barrier adjacent the semiconductor chip assembly, said encapsulant barrier at least partially defining an encapsulation area;

*providing a protective barrier in contact with said top layer* for protecting the terminals on the top layer from an encapsulation material; and

introducing an encapsulation material into at least a portion of the encapsulation area so that the encapsulation material flows to fill the encapsulation area and then cures to a substantially solid condition, the protective barrier preventing the encapsulation material from contacting the terminals on the top layer.

JA0000814 (col. 9, ll. 33-48) (emphasis added).<sup>1</sup>

As this claim points out, the top layer which supports exposed terminals is protected by the barrier, which establishes contact with it and prevents encapsulant from contaminating the exposed terminals, thereby avoiding the possibility of malfunctioning packages. JA0000814-15 (col. 9, l. 33-col. 11, l. 31).

## 2. The '977 And '627 Khandros Patents

The '977 and '627 Khandros patents claim a method for alleviating stresses on external connections of IC packages from thermal cycling. JA0154437.

---

<sup>1</sup> Tessera also asserted claims 1-4, 9-10, and 33-35 (JA0000012) all of which require the top layer limitation discussed herein.

Tessera does not appeal the Commission's findings of non-infringement and no violation as to the '977 and '627 patents, but accepts these findings in all respects.

**C. The Accused Products**

Tessera accused both  $\mu$ BGA products and wBGA devices of infringing. The Commission found that the  $\mu$ BGA products infringed the '106 patent, but that the wBGA devices do not. {

}

**SUMMARY OF ARGUMENT**

The Commission's factual conclusion that the accused wBGA devices do not infringe the '106 patent is supported by substantial evidence and must be affirmed. The Commission's non-infringement finding as to the '106 patent is

based on its determination that {

} JA0000021-22. There is ample record support for this finding that more than clears the bar of “substantial evidence,” including documentary evidence of the attributes of the accused products, testimony by both Intervenor’s expert and an inventor of the ‘106 patent, and even Tessera’s own Complaint. Indeed, Tessera never challenges the Commission’s finding that the wBGA substrate core contains all the attributes of the “top layer” nor does it challenge the factual finding by the ALJ (later adopted by the Commission) that {  
}

*Tessera’s infringement theories are bereft of any record support.* There is no evidence that {

}, meets the definition of a “top layer” that “carries terminals” on one of its surfaces. Alone, {

}, as shown by the same evidence that supports the Commission’s finding that {  
}. JA0000109. As ‘106 inventor and Tessera witness Thomas DiStefano admitted, {

} JA0100062 (198:1-9). Remarkably, Tessera never even argues that the solder mask “carries” the terminals.

{

} (as Tessera

itself has argued, TBr., 42-43). {

} Under either of

Tessera’s theories, there can be no finding of infringement.

This Court must affirm where a noninfringement finding is supported by substantial evidence even under the claim construction the appellants advance. *Fuji Photo Film Co., Ltd. v. Int’l Trade Comm’n*, 386 F.3d 1095, 1102 (Fed. Cir. 2004). Thus, even if Tessera were correct that the Commission erred in concluding that { } reversing that conclusion would not alter the outcome. Accordingly, the Court must affirm the Commission’s decision.

The Commission’s interpretation of the claim term “top layer” to exclude solder mask is well supported in the intrinsic record and should not be reviewed de novo. Tessera argues that the Commission altered its claim construction while

applying the claim to the accused devices. By framing the issue in this manner, Tessera improperly converts a factual finding of non-infringement which enjoys great deference into a legal conclusion which enjoys no deference. The Commission did not amend its claim construction, but conducted an unexceptional infringement analysis during which the fact finder referred back to the patent to draw conclusions about what a claim does not cover (as is nearly always the case with a finding of non-infringement). But even if the Court deems this a de facto modification of its original construction, the Commission's approach is well supported in the record and the conclusion of no infringement should be affirmed.

As the Commission concluded, the '106 patent distinguishes the "top layer" from the solder mask throughout the specification and in the claims themselves as separate components. There is no evidence whatsoever that the plain and ordinary meaning of "top layer" would encompass the solder mask and thus no need to show a disavowal or disclaimer. On the contrary, it is Tessera that would need to point to evidence demonstrating that the "top layer" should be construed to encompass the solder mask. Additionally, the specification describes the "top layer" as part of the "chip carrier" – consistent with the construction requiring the top layer to carry the terminals – while repeatedly characterizing the solder mask as a component distinct from the chip carrier, just as the '106 inventor did in his

testimony. The intrinsic record establishes that the top layer is not, and does not include, the solder mask layer.

**ARGUMENT**

**I. THE COMMISSION'S FINDINGS THAT THE ACCUSED wBGA DEVICES DO NOT INFRINGE THE '106 PATENT ARE SUPPORTED BY SUBSTANTIAL EVIDENCE**

The Commission made four specific findings of fact that compel a conclusion that the wBGA devices do not infringe the asserted claims of the '106 patent:

- (1) {  
}
- (2) { }
- (3) {  
} and
- (4) {  
}

JA0000029. Tessera does not dispute the Commission's claim construction nor does it dispute any factual findings supporting (1), (3) or (4). Each of these findings of fact are supported by substantial evidence and so may not be reversed. *Linear Tech. Corp. v. Int'l Trade Comm'n*, 566 F.3d 1049, 1064-65 (Fed. Cir. 2009).

As claim 1 requires “a protective barrier in contact with said top layer,” these findings of fact compel the conclusion that the wBGA devices do not infringe the asserted claims of the ‘106 patent.

**A. Construction Of “Top Layer”**

The Commission construed the term “top layer” to mean:

a layer disposed on the active side of the chip and which carries the terminals.

JA0000021. Tessera agrees with the Commission’s construction of “top layer.”

TBr., 15. {

}

B. {

After construing the claims, the Commission found that {

}....” JA0000029.<sup>2</sup> The Commission further affirmed the ALJ’s finding that {

} JA0000109.

The Commission’s finding of fact that {

} supported by substantial

evidence:

- testimony from the Intervenor’s expert JA0171146; JA0171162; JA0171177; JA0171236-37; JA0174262.
- documentary evidence -- including datasheets, schematics, and cross-section photographs of the wBGA devices JA0173348-63; JA0185658; JA0185659; JA0173285-91; JA0173336-47;
- testimony from the inventor of the ‘106 patent JA010061-62 (197:16-198:9); and

---

<sup>2</sup> The Commission’s Final Determination states that “[t]he Commission adopts the ALJ’s ID to the extent it is not inconsistent with this opinion.” JA0000003.

- Tessera’s own admissions in its Complaint and interrogatory responses. JA0170998; JA0162427-34; JA0004221 at ¶199.

This exceeds the “substantial evidence” threshold necessary to support the Commission’s finding of fact. *Yingbin*, 535 F.3d at 1335 (Fed. Cir. 2008).

The Intervenors presented expert testimony from Dr. Sinnadurai that the

{

} JA0171146; JA0171162; JA0171177.

{

}

JA0171146. The Commission may rely on expert testimony to support a finding of non-infringement. *Gemstar-TV Guide Int’l, Inc. v. Int’l Trade Comm’n.*, 383 F.3d 1352, 1363 (Fed. Cir. 2004). The Intervenors also presented expert testimony from Peter Elenius that {

} JA0171236-37; JA0174262.

{

}

JA0174262.

The documentary evidence includes datasheets, schematics, and cross-section photographs of the wBGA devices that support the finding that {

} JA0173363 (as modified to label the terminals). While the orientation of the  
above drawing is {

}

One of the inventors of the '106 patent, and a founder of Tessera, Thomas  
DiStefano testified on behalf of Tessera that {

} Dr. DiStefano also testified that {

}

JA010061-62 (197:16-198:9). Dr. DiStefano's testimony that {

}

In its Complaint, Tessera took the position that {

}

JA0170998; JA0162427-34. {

} (See,

JA0175169-79). Tessera specifically stated that

{

}

JA0004221 at ¶199. Tessera's affirmative statements should be treated as an admission that {

} *Rhone-Poulenc Argo, S.A. v. DeKalb Genetics Corp.*, 272 F.3d 1335, 1353 (Fed. Cir. 2001)(abrogated on other grounds) ("Pleadings are judicial admissions and a party may use them to render facts indisputable.")

The above evidence constitutes more than the requisite substantial evidence to support the Commission's finding that {

}

---

<sup>3</sup> At the hearing in the 630 Investigation, Tessera's Complaint was moved into evidence.

C. {

}

Tessera has not even argued, much less shown, that the Commission's finding that {

} That should end the inquiry.

Tessera instead argues two alternative theories: {

} Even if true, the "mere fact that a reasonable person might reach some other conclusion is insufficient for this court to overturn the agency's conclusion." *Akzo*, 808 F.2d at 1479 (Fed. Cir. 1986). In any case, there is no evidence in the record to support either of Tessera's alternative infringement theories.

**1. Substantial Evidence Supports The Commission's Rejection Of Tessera's First Infringement Theory**

Tessera's first infringement theory, {

} is not

supported. The Commission construed the term "top layer" to mean "a layer disposed on the active side of the chip and which carries the terminals," namely,

{ } JA0000021; JA0000107. Tessera sought and agrees with

this construction. TBr., 25. {

}”<sup>4</sup> {

} See, e.g., WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY, at 343 (to “carry” is “to sustain the weight or burden of” or to “bear”).

The Commission found that {  
} JA0000029. The ALJ rejected Tessera’s  
argument that {

}

JA0000109. This finding was adopted in the Commission’s Final Determination and is consistent with the Commission’s claim construction that {

} Tessera never challenges it, and nowhere argues that  
{ }

---

<sup>4</sup> Notably, the ALJ defined “top layer” as “an outer layer of the chip assembly upon which the terminals are *fixed*,” JA0000083, JA0000108, a definition which, like the one announced by the full Commission, {  
} Again, per the ALJ’s finding, JA0000108-09, and all the evidence of record (and undisputed by Tessera), {  
} The Commission did not reverse the “fixed” aspect of the ALJ’s claim construction, JA0000018, but affirmed it while restating it in different language with a similar meaning: “which carries the

This finding of fact is supported by substantial evidence. The Intervenor  
presented expert testimony from Dr. Sinnadurai that {

}

JA0171129-86. The Intervenor similarly presented expert testimony from Mr.  
Elenius that {

} JA0171236-37; JA0171259.

{

}

JA0171259.

As noted, *supra*, Tessera's Complaint and interrogatory responses even  
asserted that the second solder mask layer as the "encapsulant barrier." (See,  
JA0175169-79). Also as noted, *supra* at §I.B., '106 inventor DiStefano admitted  
that { } As the figures  
from Tessera's own brief and Figure 13 of the '106 patent illustrate, in some  
instances {

} TBr., 40; JA0000809, Fig. 13. (See p. 15 above.)

In light of the ample uncontradicted evidence that {

---

terminals." JA0000021. Both terms lead to the same result – {

}

}

**2. Substantial Evidence Supports The Commission's Rejection  
Of Tessera's Second Infringement Theory**

Tessera's second alternative infringement theory that {

}

In the FD, the Commission construed "thereon" for the first time in this investigation and determined that the proper construction of "thereon" requires that the claimed "terminals" be located on a *surface* of the claimed "top layer:"

JA0000022.

We find that the scope of the claim is broad enough to encompass locating the terminals on other surfaces of the 'top layer' other than the top surface, such as on the bottom or side surfaces.

*Id.* Tessera does not dispute this construction.

Under the Commission's requirement that terminals be located on a surface of the "top layer," {

} JA0185658; JA0173363. {

} TBr., 42-43, 44. {

}

**3. Apart From The Commission's Findings, There Is Simply No Evidence To Support Tessera's Infringement Theories And Therefore No Basis For A Remand**

Tessera will undoubtedly argue that even if substantial evidence supports the Commission's conclusion that {

} – this Court cannot affirm because the

Commission did not expressly premise its non-infringement finding on the “carries the terminals” aspect of its construction. Instead, Tessera has argued, the

Commission relied on a modification of its own claim construction. This argument is incorrect, for two reasons. First, the Commission did necessarily apply the

“carries the terminals” construction of “top layer” in determining that {

} and the Commission affirmed the ALJ's finding  
that "the { }  
JA0000029. As shown *supra* at §I.B., the ALJ necessarily based this conclusion  
on the finding that {  
} As long as the Court need not make new findings of  
fact, or otherwise invade the special province of the agency, it may affirm the  
agency's conclusions on any basis it deems to be supported by the record. *Koyo  
Seiko Co., Ltd. v. United States*, 95 F.3d 1094, 1101 (Fed. Cir. 1996), *quoting*  
*Arkansas AFL-CIO v. FCC*, 11 F.3d 1430, 1439 (8th Cir. 1993) ("[T]he Supreme  
Court clearly limited *Chenery* to situations in which the agency failed to make a  
necessary determination of fact or of policy."); *Aktiebolaget Karlstads Mekaniska  
Werkstad v. Int'l. Trade Comm'n*, 705 F.2d 1565, 1575 (Fed. Cir. 1983) (despite  
rejecting ITC's factual determinations as to scope and content of the prior art, "we  
may nevertheless affirm the legal conclusion of the ITC with respect to  
obviousness if we agree with it"). Here, the Court need merely affirm the  
Commission's determination that {  
} (and does not even discuss in  
its brief), namely, that { } More to the point,  
as just shown, there is no record evidence that {

}

D. {

}

The ALJ found that {

} JA0000110. {

} *Id.* This finding is undisputed and is

supported by substantial evidence recited by the ALJ. *Id. See also*, JA0142818.

E. {

}

{

} The Commission found that

{

} JA0000029. This finding

is supported by substantial evidence. JA0171144-45; JA0171160-61. Moreover,

Tessera does not dispute that {

}

**F. These Four Findings Of Fact Compel A Conclusion That The wBGA Devices Do Not Infringe The '106 Patent**

The Commission's findings that {

} As all these findings are supported by substantial evidence, the Commission's non-infringement finding must be affirmed. *Linear Tech. Corp. v. Int'l Trade Comm'n*, 566 F.3d 1049, 1064-65 (Fed. Cir. 2009).

**II. IF THE COURT INTERPRETS THE COMMISSION'S INFRINGEMENT ANALYSIS AS HAVING AMENDED ITS CLAIM CONSTRUCTION, UNDER A *DE NOVO* REVIEW THE COMMISSION'S CONCLUSION WAS CORRECT**

Even accepting the premise of Tessera's argument that the Commission modified its claim construction – though it did not – and applying *de novo* review, the Commission's conclusion that the “top layer” and the solder mask “are distinct components” is correct.

Tessera bases its argument on the Commission's construction of “top layer” as not limited to a single layer but also potentially inclusive of a composite of multiple layers. JA0000018; JA0000020-21. Tessera ignores, however, that the particular composite it proposes – where the “top layer” consists of the solder mask

together with the substrate core – is plainly inconsistent with the ‘106 patent’s clear and uniform differentiation of the “top layer 16” from the “solder mask 30,” exactly as the Commission found. JA0000028-29. For the same reason, Tessera’s argument that the solder mask *alone* could constitute the “top layer” is even more glaringly incorrect. In fact, Tessera’s argument is based on a misreading of the Commission’s analysis, the ‘106 patent, and the applicable law.

As the basis for its argument that the solder mask 30 is part of the top layer 16, Tessera relies on the Commission’s claim construction of “top layer” as not exclusive of composites. JA0000020-21; TBr., 12. But the notion that the element “top layer” does not exclude a “composite,” *i.e.*, a layer made up of multiple substances or tiers, is not the same thing as, and does not remotely imply, a finding that one numbered component layer of a patented invention (“top layer 16”) can, or should be construed to, include another separate and distinct numbered component layer (“solder mask 30”) that is distinguished from the first throughout the patent, without exception. Obviously, {

}

This is confirmed by the sole example the Commission cites as evidence in the specification “that a layer may encompass more than one material,” namely, the description in column 14, lines 32-34 of the incorporated ‘265 patent.

JA0000020 n.4. The relevant passage states that “Layer 140 may incorporate adhesives at its top and bottom surfaces so as to bind layer 138 to the chip.”

JA0141369. In the ‘265 patent, layer 138 is the “top layer,” while layer 140 is the “separate compliant underlayer.” *Id.* (col. 14, ll.20, 27). In other words, underlayer 140 could be considered as a composite together with the adhesives that it “may incorporate.” *Id.* (col. 14, l. 33). But the adhesives are not a distinctly numbered, separately described component. Indeed, this same portion of the ‘265 nicely contrasts the two concepts here at issue: Even though the top layer 138 and underlayer 140 are adjacent and bound together by adhesives, the patent clearly precludes deeming them – collectively – a single composite layer, when it describes the underlayer 140 as a “*separate* compliant underlayer 140” disposed between the top layer 138 and other components. *Id.* (col. 14, ll. 27-30). Separately identified and described adjacent components are not a “composite” layer; a layer and attached substances it “may incorporate” can be.

Thus, when the Commission found that “[n]owhere does the ‘106 patent describe or suggest that the top layer includes the solder mask layer,” but “[r]ather, the patent continually depicts them as separate and distinct components,” JA0000029, it correctly analyzed the specification and drew the right legal conclusion. The patent treats the “top layer” and the solder mask as different components, not just in one embodiment, but in every embodiment in which the

solder mask appears, six different embodiments in all. There are no embodiments where the solder mask is part of the top layer, and each is given a different unique identifying number throughout the specification and drawings (“top layer 16” and “solder mask 30”). In one embodiment (Fig. 13), they are not even touching. JA0000809. Figs. 1, 9, and 13 show them as separate, as do Figs. 2, 3, 7 and 10, though the top layer’s number is omitted in the latter. JA0000805; JA0000807-09. The text also clearly differentiates them, repeatedly, *e.g.*, “[p]referably, the solder mask is vacuum laminated to the top layer of the semiconductor assembly.” JA0000810 (col. 2, ll. 36-37); *see* JA0000810 (col. 2, ll. 24-41); JA0000812 (col. 5, ll. 10-13, 42-59); JA0000813 (col. 7, ll. 23-26, 39-59). There is not a single countervailing instance anywhere in the patent where the two are treated as identical, interchangeable, or one as part of the other. In the specification, the solder mask 30 is disclosed *only* as part of the protective barrier, which is identified as a distinct component from the top layer, with a different function, and as a distinct element of the claims. JA0000810 (col. 1, ll. 45-52; col. 2, ll. 24-41); JA0000811 (col. 3, ll. 47-48; col. 3, l. 67- col. 4, l. 3); JA0000814-15 (claims 1-34, 39-40).<sup>5</sup>

---

<sup>5</sup> Note that {

}

This conclusion that they are separate and distinct is reinforced by the '106 specification's explicit description of the "top layer 16" and "elastomeric pad 20" as part of the "chip carrier 14," in contrast to its clear differentiation between the "chip carrier 14" and "solder mask 30." JA0000812 (col. 5, ll. 10-13, 42-44); JA0000813 (col. 7, ll. 39-58); JA0000814 (col. 9, ll. 1-13). The drafters of the patent were perfectly capable of identifying particular layers as part of the chip carrier, yet they chose not to do so with regard to the solder mask 30, instead expressly treating it as distinct from the chip carrier 14. The testimony of '106 inventor (and Tessera witness) Thomas DiStefano, quoted above, confirms this. DiStefano testified that {

} JA010061-62 (197:16-198:9).

Even the legal authority cited by Tessera for the proposition that it is "generally impermissible to limit claim terms by a preferred embodiment or inferences drawn" therefrom, supports the Commission's conclusion as a correct application of the law. In *Bell Atlantic Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1270-71 (Fed. Cir. 2001) (cited at TBr., 28), this Court declined to apply the canon against limiting the claim language by reference to the preferred embodiment. The Court held that "when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single

meaning, he has defined that term ‘by implication.’” *Id.* at 1271. This is a well-established principle. *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1326, 1332 (Fed. Cir. 2009) (affirming claim construction “that the graft body did not include malleable wires because, throughout the specification, the inventors distinguished between the material of the graft body and the wires”); *Fuji Photo Film Co., Ltd. v. Int’l Trade Comm’n*, 386 F.3d 1095, 1098-99 (Fed. Cir. 2004) (affirming Commission’s construction of “opening” and rejecting broader construction sought by appellant because the specification and drawings consistently used “opening” with the meaning adopted by the Commission); *Leggett & Platt, Inc. v. Hickory Springs Mfg. Co.*, 285 F.3d 1353, 1358 (Fed. Cir. 2002) (affirming construction of claim term “support wires” that excluded other types of wires because specification referred to and depicted them under different names and as having different functions, despite lack of explicit definition or exclusion).

Indeed, the entire premise of Tessera’s argument – that the ordinary meaning of “top layer” encompasses the solder mask, and therefore an express disavowal of that scope was necessary to support the Commission’s conclusion – is wrong. Intervenors here need not show the kind of disavowal that the *Bell Atlantic* court found by implication from consistent usage, *see* 262 F.3d at 1269-70, because Tessera has advanced no evidence that the ordinary meaning of “top layer” 16

encompasses the solder mask 30, only the generic notion that the top layer can be a composite. As shown just above, “top layer” does *not* have the ordinary meaning in this patent of being inclusive of other separately identified, described and numbered components. *ICU Medical, Inc. v. Alaris Medical Sys., Inc.*, 558 F.3d 1368, 1375-76 (Fed. Cir. 2009) (affirming construction of spike as pointed where specification “never suggests that the spike can be anything other than pointed” and where there was no intrinsic or extrinsic evidence to suggest that the ordinary meaning of spike could be broader).

Indeed, {

} Tessera’s assertion to this effect proves too much. It would result in a construction under which any layer or layers adjoining the top layer could be effectively ‘added’ to the top layer for purposes of infringement analysis until Tessera arrived at the desired outcome, *i.e.*, an infringement finding. Even an intervening air pocket could be deemed part of the top layer under Tessera’s unbounded analysis, as a solid-air “composite” is nowhere expressly disavowed. This is impermissible, as others in the field of the invention would be unable to determine of what the top layer consists, and thus whether a proposed design infringes or not. *See Exxon Chemical Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1563 (Fed. Cir. 1995) (Plager, J., concurring) (“The language through which

claims are expressed is not a nose of wax to be pushed and shoved into a form that pleases and that produces a particular result ...”).

Tessera’s argument that the patent discloses that the protective barrier can consist of something other than solder mask is wholly irrelevant. TBr., 22-23. The relevant question is whether the patent discloses that the solder mask, if present, can be something other than the protective barrier, and in particular, the top layer or a part thereof. The patent discloses neither of these possibilities, nor even hints at them. Indeed, the claims of the ‘106 patent could not, consistent with 35 U.S. Code section 112, be construed to cover a system in which the solder mask was the top layer (or part thereof) because that would result in the claims being broader than the supporting disclosure. *See Toro Co. v. White Consol. Industries, Inc.*, 199 F.3d 1295, 1301-02 (Fed. Cir. 1999); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1480 (Fed. Cir. 1998) (“claims may be no broader than the supporting ...”).

### III. TESSERA HAS NOT MET ITS BURDEN OF PROVING INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS

Tessera spends a mere two sentences in its Appeal arguing that infringement is warranted under the doctrine of equivalents. TBr., 46. Tessera alleges a theory of infringement under the doctrine of equivalents based on alleged equivalents of

{

} *Id.* Tessera does not attempt to meet its burden of showing

that there is no substantial evidence in the record to support the Commission's finding of non-infringement under the doctrine of equivalents. Tessera's argument must therefore be rejected.

Tessera's equivalents theory would "vitiating the purpose of including 'thereon' in the claim language, which requires the exposed to [sic] terminals to be 'on or upon' the top layer." JA0000112. It would also eliminate the claim limitation that the "protective barrier" is "in contact with" the "top layer." Infringement under the doctrine of equivalents cannot stand if the "theory of equivalence would vitiate a claim limitation." *PC Connector Solutions LLC v. SmarDisk Corp.*, 406 F.3d 1359, 1365 (Fed. Cir. 2005).

#### **IV. ALTERNATIVE GROUNDS FOR FINDING NO VIOLATION**

Intervenors may challenge the Commission's adverse decisions to establish alternative grounds for no violation. *Surface Technology, Inc. v. Int'l Trade Comm'n*, 780 F.2d 29, 30 (Fed. Cir. 1985).

The Commission erred on two issues that are alternative grounds that support no violation with respect to the '106 patent.

First, the Commission erred by failing to find that Tessera disclaimed all embodiments having terminals located on the bottom surface of the top layer. Under a construction of "thereon" that takes this important disclaimer into account, both of Tessera's infringement theories must be rejected.

Second, the Commission erred in determining that two prior art references, Worp '366 and Juskey '759, do not anticipate the asserted claims of the '106 patent. Should the Court reverse the Commission's determination of no violation, it should remand the issue of anticipation with respect to Worp '366 and Juskey '759.

**A. Tessera Disclaimed Reading Terminals On The Bottom Surface Of The Top Layer**

The Commission erred in applying the doctrine of prosecution disclaimer to the asserted claims of the '106 patent. To avoid prior art, Tessera disclaimed any claim scope which included terminals on the bottom surface of the claimed "top layer."

**1. Legal Standard**

The Commission's application of the doctrine of prosecution disclaimer is reviewed *de novo* under the Court's claim construction jurisprudence. The doctrine of prosecution disclaimer is "a fundamental precept in [this Court's] claim construction jurisprudence," which is reviewed without deference on appeal. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The patentee's statements during prosecution, whether or not relied on by the examiner, limit the scope of the claim. *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004).

## **2. Tessera Disclaimed Reading Terminals On The Bottom Surface Of The Top Layer During Prosecution**

During prosecution of the '106 Patent, the Patent Office issued a Final Rejection stating that Claim 1 was anticipated by Figure 7 of the '265 Patent. JA0001265. To overcome the Examiner's prior art rejection, Tessera amended Claim 1 and distinguished the prior art and expressly disclaimed the bottom surface location of the terminals on the "top layer" as shown in Figure 7 of the '265 patent from reading on Claim 1 of the '106 patent:

As pointed out in the interview, however, this embodiment of Khandros '265 [Fig. 7] does not involve encapsulation of a semiconductor chip layer which has "a top layer with an array of exposed terminals thereon." Rather, the terminals 148 are disposed on the undersurface of top layer 138.

JA0001275. Relying on Tessera's argument, the Examiner entered Tessera's amendment and allowed the claims of the '106 patent over the Khandros '265 patent. JA0001285.

## **3. The Commission Failed To Apply The Full Scope Of The Disclaimer**

The Commission erred by failing to find that Tessera disclaimed reading the claims on products having terminals on the bottom surface of a top layer. The Commission found that Tessera disclaimed embodiments having terminals on the bottom of the top layer only while the terminals are unexposed. JA0000022. This conclusion is wrong for two reasons. First, Tessera did not state that it was disclaiming only exposed terminals – rather, it stated that it was disclaiming "the

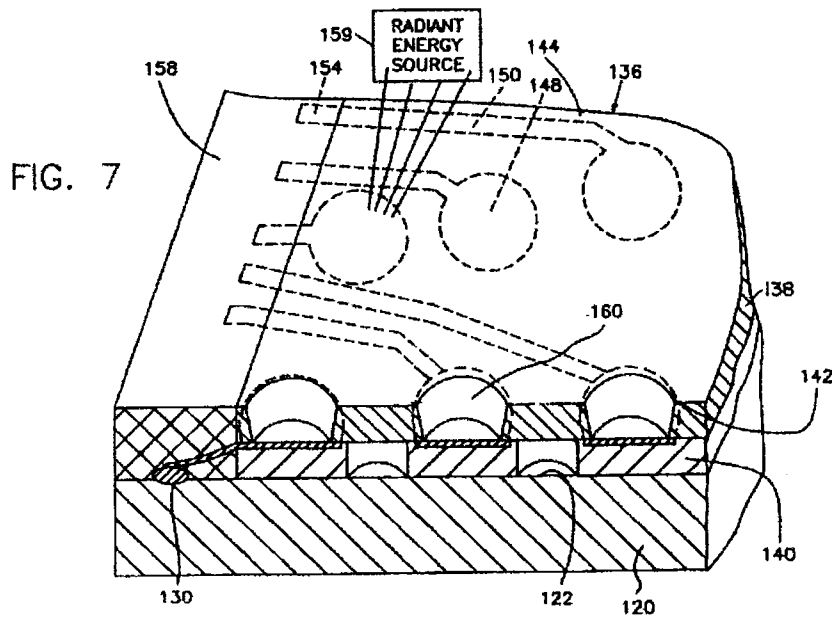
terminals 148 are disposed on the undersurface of top layer 138.” Second, the embodiment that Tessera disclaimed was not limited to unexposed terminals.

**a. Tessera’s Statements In The Prosecution Affirmatively Disclaimed Reading Terminals On The Bottom Surface**

Tessera avoided the Khandros ‘265 prior art reference by disclaiming terminals located on the undersurface of the top layer. “Rather, the terminals 148 are disposed on the undersurface of top layer 138.” JA0001275. Tessera’s statement is directed to *all* terminals, and therefore Tessera is precluded from now reading the claims to include any “top layer” with terminals on the bottom surface. *Microsoft Corp.*, 357 F.3d at 1350.

**b. The Embodiment In The Prior Art That Tessera Disclaimed Taught Both Unexposed And Exposed Terminals**

In order to obtain allowance of the asserted claims, Tessera disclaimed the Figure 7 embodiment of the ‘265 patent.



JA0141355, Fig. 7

The embodiment of Figure 7 teaches two alternative formations. First, as the Commission recognized, it teaches that holes (160) may be formed in the top layer (138) after encapsulant (158) is applied, so that the terminals (148) are *unexposed* during encapsulation. JA0141369 (col. 14, ll. 52-57). Critically, the embodiment of Figure 7 *also* teaches that the holes (160) in the top layer (138) may be formed *before* the encapsulant (158) is applied:

Holes 160 may be formed before the interposer is connected to the chip, and indeed may be formed before the terminals 148 are positioned on the interposer.

*Id.*

By disclaiming the embodiment of Figure 7, Tessera disclaimed all forms of that embodiment. The Commission's finding that Tessera disclaimed only

unexposed terminals, therefore, must be reversed as a matter of law, and the full effect of Tessera's disclaimer must be given effect.

**4. Tessera Is Barred From Asserting The Claims To Read On The wBGA Devices**

Under a proper application of the doctrine of prosecution disclaimer, Tessera is barred from asserting that the claims of the '106 patent read on {

} Tessera's infringement theories,

however, are premised on {

} TBr., 17. "Claims cannot be construed as encompassing the prior art

that was distinguished in the specification and disclaimed during prosecution."

*Kinik*, 362 F.3d at 1365.

Tessera alleges that {

} TBr., 41-46. Tessera may not reclaim that

disavowed claim scope by arguing that any part of the claimed "top layer" may be

construed to {

} *Southwall Tech. v.*

*Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995). The Commission failed to

apply the doctrine of claim disclaimer.

**B. The Asserted Claims Of The '106 Patent Are Invalid As Anticipated By Worp '366 And Juskey '759**

The Commission erroneously found that the asserted claims of the '106 patent are valid in view of Worp '366 and Juskey '759. The issue of validity should be remanded to the Commission for further review.

**1. Standard Of Review**

Whether a patent claim is anticipated by prior art is a question of fact. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967 (Fed. Cir. 2010). The Court reviews factual determinations from the ITC for “substantial evidence.” 19 U.S.C. § 1337(c); 5 U.S.C. § 706(2)(E). When the Court “reviews the factual findings underlying the ITC’s conclusion of invalidity for ‘substantial evidence,’ [it] must review those findings to ascertain whether they were established by evidence that a reasonable person might find clear and convincing.” *Checkpoint Sys. v. Int’l Trade Comm’n*, 54 F.3d 756, 761 (Fed. Cir. 1995).

**2. Worp '366 Anticipates The Asserted Claims Of The '106 Patent**

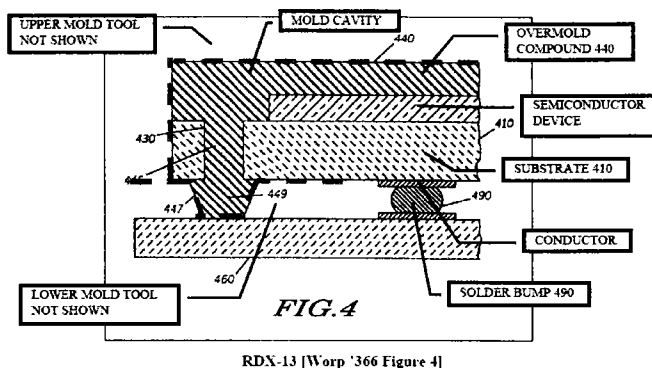
Tessera argued that Worp '366 failed to anticipate the asserted claims of the '106 patent because Worp '366 failed to disclose: (1) a protective barrier in contact with the top layer; (2) a top layer; and (3) a compliant layer (found only in claim 34). JA0000170. The Commission found that Worp '366 failed to disclose a “protective barrier in contact with said top layer” by clear and convincing evidence. JA0000171.

The evidence, however, shows that the lower mold cavity in Worp '366 (the "protective barrier") comes into contact with the substrate (the "top layer"). JA0174835 (col. 1, ll. 30-48; col. 2, ll. 16-24). Based on this evidence, the Commission concluded that "*there is a strong possibility*" that this limitation was disclosed by Worp '366. JA0000171. Indeed, the Commission found that Tessera's argument that this limitation *was not* disclosed by Worp '366 is "*unpersuasive.*" JA0000171 n. 10. The Commission erred in determining that Worp '366 failed to disclose this limitation. The Commission's finding should be reversed, and the case should be remanded to determine whether Worp '366 discloses the remaining two terms disputed by Tessera.

**a. Worp '366 Discloses "Providing A Protective Barrier In Contact With Said Top Layer"**

Worp '366 teaches "providing a protective barrier in contact with said top layer for protecting the terminals on the top layer from an encapsulation material." JA0171040; JA0171042. Worp '366 describes multiple embodiments where encapsulant extends to the pad side of the substrate to form anchoring structures. JA0174835 (col. 2, ll. 16-24). A person of ordinary skill would understand that the shapes of these anchoring structures are achieved by the use of an appropriately shaped lower mold. JA0171040; JA0174836 (col. 3, ll. 18-20). The lower mold presses up against the bottom surface of the substrate to shape and constrain where mold compound can flow, protecting the terminals from contamination.

JA0174835 (col. 1, ll. 30-45); JA0174836 (col. 3, l. 65-col. 4., l. 6). Intervenor's expert Dr. Sinnadurai annotated Figure 4 from Worp '366 to show the shape of the lower mold. JA0171033-34; JA0171040-41.



RDX-13 [Worp '366 Figure 4]

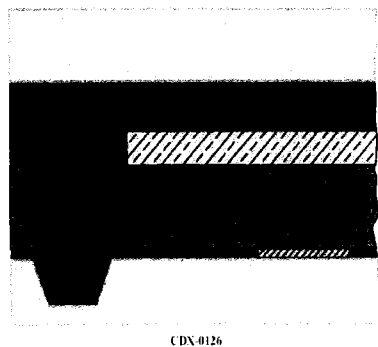
JA0185605, Fig. 4

(Lower mold tool coming in contact with the substrate.) Without this direct contact, mold encapsulant would directly “flash” over to the contact or terminal – a result that Worp '366 expressly taught against and sought to avoid. JA0174835 (col. 1, ll. 45-48).

Tessera's expert, Dr. Goosey, agreed that the dotted line added by Dr. Sinnadurai to the figure above would form pedestal 449 exactly as shaped in Fig. 4. JA0103172-73 (3303:23-3304:8). Thus, the lower mold used to shape the pedestal is the “protective barrier in contact with said top layer.”

To overcome this art, Tessera argued that Worp '366 does not disclose a “protective barrier in contact with said top layer” because the exposed terminals on the bottom of the substrate would prevent the lower mold from coming in contact

with the substrate. JA0171041. According to Tessera, the transfer mold process of Worp '366 would leave a gap between the lower mold and the substrate allowing molding compound to spread out and contaminate the pads. JA0171041-42. Tessera's expert Dr. Goosey redrew the disclosure of Worp '366 to show his hypothetical lower mold tool and the contamination that would result. JA0155127.



JA0155127

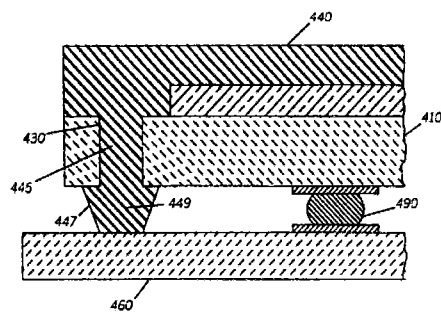


FIG. 4

JA0174834

JA0171042. Thus, the mold flash contacts the solder ball pads **only** if the mold *is not in contact* with the top layer, while the result shown in Figure 4 occurs only if the lower mold is in contact with the top layer. Based on the *hypothetical* presented in JA0155127, Tessera contends that the lower mold would not be “in contact with” the substrate and would not prevent encapsulant from contacting the terminals.

Tessera's argument required it to modify the prior art. Figure 4 of Worp '366 does not depict any encapsulant between pedestal 449 and the pad above the solder ball 490. JA0174835 (col. 1, ll. 30-45); JA0174836 (col. 3, l. 65-col. 4, l.

6); JA0174833-34. Indeed, Worp '366 expressly states that contamination is to be avoided. JA0174835 (col. 1, ll. 45-48).

**b. The Commission Failed To Apply Properly The Clear And Convincing Standard**

The Commission found that “Worp '366 does disclose transfer molding and the use of mold tools in its specification.” JA0000170-71. In view of this finding, the Commission found that “*there is a strong possibility*” that Worp '366 discloses a “protective barrier in contact with said top layer.” *Id.* (emphasis added). Just as importantly, the Commission rejected Tessera’s argument as “unpersuasive.” JA0000171 fn. 10. “As Tessera’s own expert, Dr. Goosey, stated, engineers engaged in transfer molding would design the mold and take into consideration the need to prevent encapsulation material from contacting the exposed terminals.” *Id.* (citations omitted).

Worp '366 clearly discloses that the lower mold cavity *comes into contact* with the substrate, and not, as Tessera suggests, that the mold cavity *does not* come into contact with the substrate. When only two alternatives exist and the fact finder determines that there is a “strong possibility” that the first alternative is disclosed, and the second alternative is “unpersuasive”, the clear and convincing standard has been satisfied:

The “clear and convincing” standard is an intermediate standard which lies somewhere in between the “beyond a reasonable doubt” and the “preponderance of the evidence” standards of proof. *Addington v. Texas*, 441 U.S. 418, 425 (1979). Although an exact definition is elusive, “clear and convincing evidence” has been described as evidence that “place[s] in the ultimate factfinder an abiding conviction that the truth of its factual contentions are highly probable.”

*Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1360 n.5 (Fed. Cir. 2007) (citing *Colorado v. New Mexico*, 467 U.S. 310, 316 (1984)). Recently, the Federal Circuit overturned a denial of anticipation and invalidated a claim where the “only reasonable conclusion that [could] be drawn from the evidence” was that the claim was invalid. *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1348 (Fed. Cir. 2009). Here, the only reasonable conclusion is that the lower mold cavity of Worp ‘366 comes into contact with the substrate. The Court should reverse the Commission’s finding that Worp ‘366 fails to disclose “a protective barrier in contact with said top layer,” and remand the issue of validity to determine whether Worp ‘366 discloses the remaining disputed limitations.<sup>6</sup>

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<sup>6</sup> Worp ‘366 clearly states that the chip can be mounted on the substrate with flip-chip bonding. JA0174835 (col. 2, l. 65-col. 3, l. 8). Flip-chip bonding would result in a face-down configuration which would satisfy the Commission’s construction of “top layer.” Moreover, Worp ‘366 discloses a conductive epoxy that satisfies the Commission’s construction of the Claim 34 limitation “compliant layer.” JA0174835 (col. 2, ll. 61-65).

### **3. The Asserted Claims Of The '106 Patent Are Invalid As Anticipated By Juskey**

The Commission found that Juskey '759 fails to disclose "an array of exposed terminals" and also fails to disclose a "a protective barrier in contact with the top layer." JA0000169. The Commission determined that the "protective barrier" is not "in contact" with the top layer because the adhesive taught by Juskey '759 used to attach the temporary support barrier prevents contact between the two. JA0000169.

The Commission erred in finding that "because Juskey '759 actually teaches means of covering the terminals with adhesive rather than [sic] keeping them exposed during encapsulation," there is no clear and convincing evidence that the Juskey '759 discloses "exposed terminals." JA0000169. The Commission ignored the express teaching of Juskey '759, which not only describes an array of pads on the bottom substrate surface, but also discloses preventing molding compound from flashing onto the bottom surface. JA0174796 (col. 1, ll. 13-16); JA0174797 (col. 3, ll. 46-54). If the pads were not exposed prior to encapsulation, there would be no need for Juskey '759 to teach the use of a temporary substrate to prevent flash contamination. JA0171016. Juskey '759 additionally teaches that the adhesive is easily removed and results in a clean substrate that is ready for joining to a printed circuit board. JA0174796 (col. 2, ll. 45-48); JA0174797 (col. 3, ll. 35-

37). This would only be true if the terminals were already exposed. JA0171011-13; JA171016.

Moreover, Juskey '759 states that the use of adhesive to attach the temporary support substrate is just one embodiment. JA0174796 (col. 2, ll. 20-35). Claim 1 of Juskey '759 describes "attaching the temporary support substrate to the second major face of the circuit carrying substrate." JA0174797 (col. 4, ll. 29-30). Claim 2 includes the additional limitation of "attaching the temporary support substrate solely by means of an adhesive." *Id.* (col. 4, ll. 38-39). The doctrine of claim differentiation dictates that Claim 1 is not limited to attaching the temporary support substrate by means of an adhesive. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004). Thus, in Claim 1, Juskey '759 discloses attaching a temporary support substrate without the use of an adhesive.

The Commission's decision should also be reversed because it improperly rejected Intervenors' argument that the temporary support substrate in combination with the adhesive in Juskey '759 together comprise the claimed "protective barrier." JA0000169. The Commission found that "the temporary support substrate and the adhesive used to attach the temporary support substrate are two separate and distinct things." JA0000169. This finding is contradicted by the Commission's finding that the claim term "top layer" could be a composite or multi-tiered layer. JA0000020. In construing "top layer" to allow for composite

layers, the Commission relied on the disclosure in the '265 Patent which states that "[l]ayer 140 may incorporate adhesives at its top and bottom surfaces so as to bind layer 138 to the chip." JA0000020; JA0141369 (col. 14, ll. 32-34). Thus, because the Commission explicitly relied on a layer's use of adhesive in construing "top layer" to allow for multiple layers, it similarly follows that the disclosure of a temporary support substrate together with adhesive in Juskey '759 together constitutes the claimed "protective barrier."

**V. THE ITC'S NON-INFRINGEMENT FINDINGS FOR THE '977 AND '627 PATENTS SHOULD NOT BE VACATED**

The Commission found that the Intervenor did not infringe two other patents asserted by Tessera, the '977 and '627 patents. These patents expire on September 24, 2010, so Tessera argues that this portion of its appeal will be moot and that the Court should vacate the Commission's finding of no violation with regard to the '977 and '627 patents. *Id.* at 48-49.

The appropriate action is to dismiss Tessera's appeal without vacating the Commission's conclusion. "When a case is moot . . . 'the principal condition to which we have looked [in determining whether vacatur is appropriate] is whether the party seeking relief from the judgment below caused the mootness by voluntary action.'" *Aqua Marine Supply v. Aim Machining, Inc.*, 247 F.3d 1216, 1221 (Fed. Cir. 2001).

Here, Tessera caused the mootness issue by choosing to bring this action in the Commission in December 2007, with full knowledge that a final decision through appeal was unlikely to be reached prior to the expiration of the '977 and '627 patents. Tessera's selective assertion of the claims of the '977 and '627 patents is telling. In the 605 ITC Investigation, currently on appeal in this Court, Tessera is continuing to assert two patents related to the '977 and '627 patents even though these two related patents also expire on September 24, 2010. Tessera has not asked the Court to vacate the Commission's finding of violation in the 605 Investigation. Tessera has not surrendered the exclusion order in its favor in the 605 Investigation because the patents there will expire on September 24, 2010. It is a reasonable inference that had the Commission found a violation for infringement of the '977 or '627 patents, Tessera would not have requested that the decision be vacated because the '977 and '627 patents will expire on September 24, 2010.

Tessera seeks to vacate the Commission's decision only when Tessera loses. Vacating the Commission's decision in this matter would therefore be inequitable and it is unwarranted under *Aqua*, 247 F.3d at 1221.

**VI. TESSERA'S PATENT RIGHTS ARE EXHAUSTED AS TO  
PACKAGED DRAM CHIPS THAT THE ANP PARTIES  
PURCHASED FROM LICENSED ENTITIES**

In declining to review the Initial Determination with regards to patent exhaustion, the Commission adopted the ALJ's holding that Tessera's patent rights were exhausted {

19 C.F.R. § 210.42(h)(2); *see also* JA0000051 (Commission determining not to review patent exhaustion issue). The Commission held that {

JA0000210 (emphasis added). Critically, the Commission concluded that:

{

}

JA0000212 (emphasis added). Tessera now seeks to overturn the Final Determination as to patent exhaustion using its twice-rejected theory that

{

}<sup>7</sup> TBr., 55-62. Tessera's theory is patently absurd when viewed in light of the facts. Under its license agreements, {

} See e.g., JA0100924-

27 (1060:19-1061:2, 1062:23-1063:2); JA0100981 (1117:8-17); JA0100985-87

(1121:10-16, 1121:24-1122:9). In many circumstances, {

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<sup>7</sup> Tessera's challenge to the Commission's determination on patent exhaustion hinges solely on the threshold issue { }" As for the other elements of patent exhaustion, Tessera has alleged that the Intervenor's products at issue {

} JA0100922-24 (1058:23-1059:7, 1060:6-18); JA0100926 (1062:16-22); JA0100967 (1103:4-13); JA0100998 (1134:3-17).

Further, Tessera does not dispute {the issue of territoriality, and similarly did not raise it in its pre- and post-hearing briefs, during trial, or in its responses to the Commission.}

} JA0000209.

With respect to patent exhaustion, Tessera's theory is pure fallacy, and conflates the threshold issue of "authority to sell" with Tessera's remedies in contract law. Accordingly, the Commission's and ALJ's holding with regards to patent exhaustion should be affirmed.<sup>8</sup>

**A. The ALJ Correctly Applied *Quanta* In Holding {**

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{

} JA0102941 (3072:15-24); JA0102943-45 (3074:9-22, 3074:23-3076:5); JA0102949-50 (3080:23-3081:25); JA0102978-82 (3109:13-3110:2, 3110:12-3113:18); JA0102992-93 (3123:21-3124:16). Contrary to Tessera's position, the Supreme Court has held that the occurrence (or non-occurrence) of a post-sale event, *i.e.*, the payment of royalties to Tessera, is irrelevant to the patent

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<sup>8</sup> Tessera failed to address the standard of review with regards to the doctrine of patent exhaustion. Patent exhaustion raises mixed questions of fact and law. Interpretation of a license agreement is a matter of contract construction, and subject to *de novo* review, whereas underlying factual determinations are subject to the substantial evidence standard discussed *infra*. *Alfred E. Mann Found. for Sci. Research v. Cochlear Corp.*, 604 F.3d 1354, 1359 (Fed. Cir. 2010) (interpretation of a license agreement is a question of law subject to *de novo* review; evaluation of parol evidence is a factual determination to be reviewed deferentially.)

exhaustion doctrine. *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617, 128 S. Ct. 2109, 2121 (2008) (“Exhaustion is triggered only by a sale authorized by the patent holder.”)

As the ALJ found, {

} JA0000204. Like Quanta, {

} JA0100919-

21 (1055:24-1056:4, 1057:16-18); JA0100925 (1061:9-11); JA0100963-65 (1099:24-1100:1, 1101:13-16); JA0100980-82 (1116:8-11, 1116:25-1117:2, 1118:14-16). {

}

*See e.g.*, JA0156449; JA0156112-113; JA0155810. {

}

JA0154749-50; JA0170464-88 (322:1-11, 323:12-324:2, 324:9-325:7, 326:17-328:14, 328:21-332:18, 333:4-17, 334:11-335:2, 335:21-336:15, 337:4-345:15,

