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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* HANS-PETER BLATTLER,  
PETER STRAUB, and JOSE RAMOS

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Appeal 2019-002508  
Application 13/161,544  
Technology Center 2800

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Before ST. JOHN COURTENAY III, JOHN A. EVANS, and  
SCOTT B. HOWARD, *Administrative Patent Judges*.

EVANS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> seeks our review under 35 U.S.C. § 134(a) of the Examiner's Final Rejection of claims 1–13, 15–26, and 28. Appeal Br. 1. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.<sup>2</sup>

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<sup>1</sup> We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42. The Appeal Brief identifies Schurter AG, as the real party in interest. Appeal Br. 2.

<sup>2</sup> Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Brief (filed September 26, 2018, “Appeal Br.”), the Examiner's Answer (mailed December 3, 2018, “Ans.”), the Final Action (mailed April 18, 2018, “Final Act.”), and the Specification (filed July 25, 2014, “Spec.”) for their respective details.

## STATEMENT OF THE CASE

### *Invention*

The claims relate to a fuse element, formed by multilayer technology, for use in an electronic circuit on a printed circuit board. *See* Abstract.

### *Prior Decision*

In a DECISION mailed September 22, 2017, the present Panel of the Board REVERSED the rejections of the claims. Pending claim 1 retains its then-pending form.

### *Claims*

Claims 1 and 28 are independent. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below:

1. A fuse element for use in electric and/or electronic circuits constructed by multilayer technology, comprising a printed circuit board substrate material, coated with a metal or metal alloy defining a fuse and being formed by photolithographic and/or printing image-producing techniques and ensuing etching or engraving processes, wherein the printed circuit board substrate material, on which the fuse is provided, comprises at least a high-temperature-stable, electrically insulating material.

### *References and Rejections<sup>3</sup>*

<b>Author</b>	<b>Reference</b>	<b>Date</b>
Sims	US 2,941,059	June 14, 1960
Ganci	US 3,248,680	Apr. 26, 1966
Gaia	US 4,041,435	Aug. 9, 1977
Parker	US 2003/0142453 A1	July 31, 2003

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<sup>3</sup> The present application is being examined under the pre-AIA first to invent provisions. Final Act. 2.

1. Claims 1–4, 7–13, 15, 16, and 18–25 stand rejected under 35 U.S.C. § 102(b) as anticipated by Parker. Final Act. 5–9.
2. Claims 1, 21, 23, and 25 stand rejected under 35 U.S.C. § 102(b) as anticipated by Sims. Final Act. 10–11.
3. Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as obvious over Parker taken alone. Final Act. 12–13.
4. Claim 17 stands rejected under 35 U.S.C. § 103(a) as obvious over Parker and Gaia. Final Act. 13–14.
5. Claims 26 and 28 stand rejected under 35 U.S.C. § 103(a) as obvious over Parker and Ganci. Final Act. 14–16.
6. Claims 26 and 28 stand rejected under 35 U.S.C. § 103(a) as obvious over Sims and Ganci. Final Act. 17–19.

#### ANALYSIS

We have reviewed the rejection of claims 1–13, 15–26, and 28 in light of Appellant’s arguments that the Examiner erred. Based on the record before us and for the reasons explained below, we concur with Appellant’s contentions that the Examiner erred.

#### OBJECTIONS: SPECIFICATION AND CLAIMS 26 AND 28.

The objections by the Examiner to the Specification (*see* Final Act. 2–3; Appeal Br. 6–8, 11–18), and to claims 26 and 28 (*see* Final Act. 4), are not within our jurisdiction because these are petitionable, not appealable, issues. The proper procedure under MPEP §1002.02(c)(4) is to file a petition with the Technology Center Director under 37 C.F.R. §1.113(a) regarding any objections made by the Examiner (“Petition may be taken to

the Director in the case of objections or requirements not involved in the rejection of any claim.”).

CLAIMS 1–4, 7–16, AND 18–25: ANTICIPATION BY PARKER.

Appellant contends Parker fails to disclose “a printed circuit board substrate material, *coated* with a metal or metal alloy defining a fuse,” as recited in claim 1. Appeal Br. 19.

*A printed circuit board substrate material.*

Claim 1 recites, *inter alia*, “wherein the printed circuit board substrate material, on which the fuse is provided, comprises at least a high-temperature-stable, electrically insulating material.” Claim 28, the only other independent claim, contain a commensurate recitation.

The Examiner maps the claimed “printed circuit board substrate material,” to Parker’s disclosure of KAPTON. Final Act. 6. The Examiner finds “KAPTON” is a temperature stable electrically insulating printed circuit board substrate material.” *Id.* (citing Wikipedia).<sup>4</sup>

Appellant contends Parker only discloses that the upper and lower intermediate insulation layers are each fabricated from a dielectric film, such as a 0.002 inch thick polyimide commercially available and sold under the trademark KAPTON. Appeal Br. 23 (citing Parker, ¶ 45). Appellant argues the person of ordinary skill would have understood that the fuse element layer (20) is a layer of material that is separate from the insulating layers since it is placed between the insulating layers (22, 24). *Id.* (citing Parker, Fig. 2). Appellant further argues the Examiner has not provided any

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<sup>4</sup> <https://en.wikipedia.org/wiki/Kapton>.

evidence that Parker teaches the insulating layer is a printed circuit board substrate material. *Id.*

The Examiner finds “Kapton is used in, among other things, flexible printed circuits.” Ans. 9 (citing <https://en.wikipedia.org/wiki/Kapton>). Thus, the Examiner finds Parker teaches Kapton as a printed circuit substrate material, as claimed.

First, we decline to credit the Examiner’s citation to a Wikipedia page because neither the Board, nor the Courts, consider Wikipedia to be a reliable reference. *See Ex parte Three-Dimensional Media Group, Ltd.*, No. 2009-004087, 2010 WL 3017280, at \*17 (BPAI July 30, 2010) (“Wikipedia is generally not to be considered as trustworthy as traditional sources for several reasons, for example because (1) it is not peer reviewed; (2) the authors are unknown; and (3) apparently anyone can contribute to the source definition” (citing [Tehradium, Inc. Blackboard Connect Inc., No. 2-08-CV-00214, 2009 WL 1152985 \\*4 n. 5 \(E.D. Tex. Apr. 29, 2009\)](#)); *Bing Shun Li v. Holder*, No. 09-60551, F. App’x 854, 857 (5th Cir. 2010) (noting Wikipedia’s unreliability) (citing *Badasa v. Mukasey*, 540 F.3d 909, 910–11 (8th Cir. 2008)). The dates associated with a Wikipedia page are uncertain because “anything can be fixed or improved later.” *Id.*

Second, the Courts acknowledge “[t]he longstanding difficulty [that] is the contrasting nature of the axioms that (a) a claim must be read in view of the specification and (b) a court may not read a limitation into a claim from the specification.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1120 (Fed. Cir. 2004). Appellant does not provide an explicit definition for the claimed material. However, even when guidance is not provided in explicit definitional format, “the specification

may define claim terms ‘by implication’ such that the meaning may be ‘found in or ascertained by a reading of the patent documents.’” *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (quoting *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001)).

Appellant defines the term, at least by implication, by disclosing a first embodiment wherein it “is advantageous to select the material of the printed circuit board substrate such that the printed circuit board substrate material comprises at least one heat-hardened, glass-fiber-reinforced hydrocarbon/ceramic laminate. Material of this kind is available on the market, for instance from the Rogers Corporation under the product name R04000.” Spec. ¶ 11. Appellant discloses a second embodiment wherein “the printed circuit board substrate material preferably comprises at least one ceramic-enriched, temperature-conducting epoxy resin laminate, and this material is known and available on the market under the product name Arlon91ML from the Arlon Corporation.” Spec. ¶ 12.

We agree with Appellant (*see* Appeal Br. 23), the Examiner has provided no evidence that a person of ordinary skill in the art would recognize a 0.002 inch thick polyimide film, i.e., KAPTON, as the equivalent of either a “heat-hardened, glass-fiber-reinforced hydrocarbon/ceramic laminate” or a “ceramic-enriched, temperature-conducting epoxy resin laminate,” as disclosed by Appellant. *See* Spec., ¶¶ 11, 12. Contrary to the Examiner, Parker does not disclose KAPTON as a “printed circuit board substrate material.” Parker discloses “upper and lower intermediate insulation layers are each fabricated from a dielectric

film, such as a 0.002 inch thick polyimide commercially available and sold under the trademark KAPTON®.” Parker ¶ 45 (cited by the Examiner).

In view of the foregoing, we decline to sustain the rejection of claims 1–13, 15–26, and 28 as anticipated by Parker.

CLAIMS 5 AND 6: OBVIOUSNESS OVER PARKER.

The Examiner applies Parker, as discussed above. Final Act. 12. Dependent claims 5 and 6 are allowable for at least the reason that these claims depend from and include the elements of allowable independent claim 1. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988); *Minnesota Mining and Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CLAIMS 17, 26, AND 28: OBVIOUSNESS OVER PARKER AND GAIA OR GANCI.

The Examiner applies Parker, as discussed above and does not apply Gaia or Ganci as relevant to the preceding discussion. Final Act. 14–15. In view of the foregoing, we decline to sustain the rejection of claims 17, 26, and 28 as obvious over Parker, Gaia, and/or Ganci.

CLAIMS 1, 21, 23, AND 25: ANTICIPATION BY SIMS.

*A high-temperature-stable, electrically insulating material.*

The Examiner maps the claimed “wherein the printed circuit board substrate material, on which the fuse is provided, comprises at least a high-temperature-stable, electrically insulating material,” to Sims’ disclosure of:

an insulator board generally designated by numeral 10 of an insulating material such as a fiber, synthetic resin, or plastic capable of withstanding heat to an extent necessary in accordance with the present invention.

Final Act. 10 (quoting Sims, col. 1, ll. 66–71).

Appellant contends Sims disclosed printed circuit board substrate comprises only prior art materials that allow temperatures only below 200°C. Appeal Br. 27. Appellant argues there is no evidence Sims relates to fuses which in their application environments experience temperature up to 280°C. *Id.*

The Examiner finds Sims discloses “an insulating material such as a fiber, synthetic resin, or plastic capable of withstanding heat to an extent necessary in accordance with the present invention.” Ans. 14 (quoting Sims, col. 1, ll. 66–71).

The Examiner makes no finding as to how much heat is necessary according to Sims invention. *See* Ans. 14. Leaving to our speculation whether Sims may withstand heat above 200°C that Appellant discloses in relation to their invention. Spec., ¶ 7; *see* Appeal Br. 27. We decline to engage in Speculation. As discussed above, we find a person of ordinary skill in the art would not recognize an insulating material such as a fiber, synthetic resin, or plastic capable of withstanding heat to an [unspecified] extent, as the equivalent of either a “heat-hardened, glass-fiber-reinforced hydrocarbon/ceramic laminate” or a “ceramic-enriched, temperature-conducting epoxy resin laminate,” as disclosed by Appellant. *See* Spec., ¶¶ 11, 12.

In view of the foregoing, we decline to sustain the rejection of claims 1, 21, 23, and 25 as anticipated by Sims.

Claims 26 and 28 stand rejected under 35 U.S.C. § 103(a) as obvious over Sims and Ganci.

DEPENDENT CLAIM 26 AND INDEPENDENT 28:

OBVIOUS OVER SIMS AND GANCI.

The Examiner applies Sims, as discussed above and does not apply Ganci as relevant to the preceding discussion. Final Act. 17–18. In view of the foregoing, we decline to sustain the rejection of claims 26 and 28.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Claims Affirmed	Claims Reversed
1–4, 7–16, 18–25	102	Parker		1–4, 7–16, 18–25
1, 21, 23, 25	102	Sims		1, 21, 23, 25
5, 6	103(a)	Parker		5, 6
17	103(a)	Parker and Gaia		17
26, 28	103(a)	Parker and Ganci		26, 28
26, 28	103(a)	Sims and Ganci		26, 28
<b>Overall Outcome</b>				1–13, 15–26, 28

REVERSED<sup>5</sup>

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<sup>5</sup> Because we do not sustain the Examiner’s rejection for the reasons discussed herein, we need not address Appellant’s further arguments. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (finding an administrative agency is at liberty to reach a decision based on “a single dispositive issue”).