

**BEFORE THE PATENT TRIAL AND APPEAL BOARD IN THE UNITED  
STATES PATENT AND TRADEMARK OFFICE**

**Trial No.:** IPR 2015-01653

**In re:** U.S. Patent No. RE43,106

**Patent Owner:** Toshiba Samsung Storage Technology Korea Corporation

**Petitioners:** LG Electronics, Inc., and LG Electronics U.S.A., Inc.

**Inventors:** Jang-Hoon Yoo and Chul-Woo Lee

For: OPTICAL PICKUP COMPATIBLE WITH A DIGITAL VERSATILE DISK  
AND A RECORDABLE COMPACT DISK USING A HOLOGRAPHIC  
RING LENS

\* \* \* \* \*

**PATENT OWNER'S RESPONSE PURSUANT TO 37 C.F.R. § 42.120**

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PATENT OWNER’S EXHIBIT LIST

CERTIFICATE OF SERVICE

Toshiba Samsung Storage Technology Korea Corporation (“patent owner” or “PO”) submits this response to the petition regarding U.S. Patent No. RE43,106 (the ‘106 patent). The ‘106 patent is Ex. 1001. Petitioner has the burden of proving unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e). Petitioner has not met its burden for the reasons explained below. *See also* Ex. 2002 (Lebby Decl.) at ¶¶ 14-31.

### **I. CLAIM CONSTRUCTIONS**

PO respectfully submits that the broadest reasonable construction standard should not apply in IPRs. Instead, the PTAB should construe claim terms in IPRs using the same *Phillips* standard used by district courts in litigations. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

The IPR procedure was designed to be a surrogate for litigation, where the broadest reasonable construction (BRC or BRI) standard does not apply. *See, e.g.*, H.R. Rep. No. 112-98, at 46-47. IPRs are in effect adjudications that test patent validity using the fixed meaning of legally operative property rights; they are not examinations in which the scope of patent claims is fluid and changeable. In IPRs, just like district court litigation, the applicant-and-examiner back-and-forth is absent. There is no robust right to amend, and there is no guaranteed ability to resolve claim scope ambiguity. Indeed, patentees do not have a right to amend their claims in an IPR; instead, they must seek permission from the Board – permission that in practice rarely has been granted. Even when permission is

dissent in *In re Cuozzo Speed Techs.*, *infra*, noted, all hallmarks justifying use of the broadest reasonable interpretation standard are absent from IPR proceedings. An IPR cannot be a surrogate for litigation when it uses a different claim construction standard that leads to different results. Further, it is respectfully submitted that 37 C.F.R. 42.100(b), which directs the PTAB to give claim terms the broadest reasonable construction rather than the *Phillips* standard, is not a valid exercise of the USPTO's rulemaking authority. PO respectfully submits that the *Phillips* standard of claim interpretation should apply in IPRs.

The PTAB has taken the position that in IPRs, claim terms in an unexpired patent are to be given their broadest reasonable construction in light of the specification of the patent in which they appear. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1277-79 (Fed. Cir. 2015), *cert granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 84 U.S.L.W. 3218 (U.S. Jan. 15, 2016) (No. 15-446). But even under this standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art, in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). The “broadest reasonable interpretation” does not mean the “broadest possible interpretation.”

A. *“selectively diffract the first and second light beams as a function of wavelength” (claim 7)*

Claim 7 of the ‘106 patent requires a diffractive region to “selectively diffract the first and second light beams as a function of wavelength.” Under either the “broadest reasonable construction” or *Phillips* claim construction standard, this phrase should be construed to mean “*diffract the first and second light beams according to their respective wavelengths.*” Ex. 2002 at ¶¶ 17-19. Significantly, *this* claim requires that **both** beams are diffracted by the diffractive region. The parties agree on this construction, as petitioner proposed this exact same construction on page 13 of the Petition.

The specification of the ‘106 patent describes multiple embodiments. In some embodiments, one of the light beams is diffracted. In other embodiments, both light beams are diffracted. Claim 1 for example covers at least the former approach, whereas claim 7 is directed to the latter approach. This agreed-upon construction is thus consistent with the specification of the ‘106 patent.

For example, Fig. 6 of the ‘106 patent shows a 650 nm beam identified by cross members and a 780 nm beam identified by circles. Ex. 1001 at Fig. 6 and 6:53-63. The vertical axis of Fig. 6 is transmissive efficiency and the horizontal axis of Fig. 6 is groove depth of the diffraction grating. Ex. 1001 at Fig. 6 and 4:18-20; and Ex. 2003 at pgs. 21-23. In Fig. 6, both beams are diffracted a majority of the time (*i.e.*, at most diffraction grating groove depths, both beams are diffracted). Ex. 2002 at ¶¶ 18-19.

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