

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

LG ELECTRONICS INC.,  
Petitioner,

v.

IMMERVISION, INC.,  
Patent Owner.

---

IPR2020-00195  
Patent 6,844,990 B2

---

Before KRISTINA M. KALAN, WESLEY B. DERRICK, and  
KIMBERLY McGRAW, *Administrative Patent Judges*.

DERRICK, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314

## I. INTRODUCTION

On November 27, 2019, LG Electronics Inc. (“Petitioner” or “LG Electronics”) filed a Petition requesting an *inter partes* review of claim 21 (“the challenged claim”) of U.S. Patent No. 6,844,990 B2 (Ex. 1001, “the ’990 patent”). Paper 2 (“Pet.”). ImmerVision, Inc. (“Patent Owner” or “ImmerVision”) filed a Preliminary Response to the Petition. Paper 5 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314(b) (2018); 37 C.F.R. § 42.4(a). To institute an *inter partes* review, we must determine that the information presented in the Petition shows that there is “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Applying that standard, for the reasons set forth below, we institute an *inter partes* review as to all grounds raised in the Petition.

## II. BACKGROUND

### A. *Real Parties in Interest*

Petitioner LG Electronics Inc. identifies LG Electronics U.S.A., Inc. and LG Innotek Co. Ltd. as additional real parties-in-interest. Pet. 2. Patent Owner ImmerVision, Inc., identifies itself as the real party-in-interest. Paper 4, 2. The parties do not raise any issue about real parties-in-interest.

### B. *Related Proceedings*

The parties identify two pending district court cases involving the ’990 patent as related matters: *ImmerVision, Inc. v. LG Electronics U.S.A.*, Case No. 1-18-cv-01630 (D. Del.) and *ImmerVision, Inc. v. LG Electronics U.S.A.*, Case No. 1-18-cv-01631 (D. Del.). Pet. 2; Paper 4, 2–3.

Petitioner concurrently filed another petition that challenges claim 5 of the '990 patent. *See LG Electronics Inc. v. Immervision, Inc.*, IPR2020-00179, Paper 2.

In addition, Petitioner states the '990 patent: (1) was the subject of *Ex Parte* Reexamination Control No. 90/013,410; (2) was challenged in an *inter partes* proceeding, *Panasonic System Networks Co., Ltd. v. 6115187 CANADA INC.*, IPR2014-01438; and (3) was the subject of three other district court cases, now closed. *See* Pet. 2–3; *see also* *Panasonic System Networks Co., Ltd. v. 6115187 CANADA INC.*, IPR2014-01438, Paper 11 (PTAB Nov. 26, 2014) (terminating proceeding prior to institution following settlement).

*C. The '990 Patent (Ex. 1001)*

The '990 patent is titled “Method for Capturing and Displaying a Variable Resolution Digital Panoramic Image” and issued on Jan. 18, 2005, from an application filed on Nov. 12, 2003. Ex. 1001, code (22), (45), (54). The application for the '990 patent is a continuation of application No. PCT/FR02/01588, filed on May 10, 2002, and claims priority to foreign application FR 01 06261, filed May 11, 2001. *Id.* at code (30), (63).

The '990 patent is directed to capturing a digital panoramic image that includes using a panoramic objective lens having “a distribution function of the image points that is not linear relative to the field angle of the object points of the panorama.” Ex. 1001, Abstract. The image obtained using such a panoramic objective lens has at least one zone that is expanded and another zone that is compressed. *Id.* The patent further provides for correcting the non-linearity of the panoramic image initially obtained. *Id.*

The '990 patent was the subject of an *ex parte* reexamination. *Id.* at 25–27 (Ex Parte Reexamination Certificate (10588th)). The

IPR2020-00195  
Patent 6,844,990 B2

Reexamination Request—Control No. 90/013,410—was filed November 26, 2014. *Id.* at 25; Ex. 1003, 328–339 (“Request by Patent Owner for *Ex Parte* Reexamination of U.S. Patent No. 6,844,990”). A preliminary amendment, *inter alia*, canceling certain claims and amending others was filed with the request for reexamination. *See* Pet. 17–18; Ex. 1003, 328–354. The preliminary amendment did not amend or cancel claim 17—the base claim for claim 21. Ex. 1001, 21:7–11; Ex. 1003, 342–343. The Patent Office granted Patent Owner’s request for reexamination of the identified claims. Ex. 1003, 52–63. The Patent Office declined to reexamine claims 5, 8, 9, 12–14, 21, 24, and 26 on the basis that “the requester did not request reexamination of . . . and did not assert the existence of a substantial new question of patentability for those claims.” *Id.* at 56 (citing 35 U.S.C. § 311(b)(2)). The Patent Office issued an Office Action on January 29, 2015, rejecting, *inter alia*, independent claim 17—the base claim for claim 21—as anticipated by Nagaoka (US 6,128,145 “Ex. 1004”) and Baker (US 5,686,957 “Ex. 1005”), which are asserted in the present proceeding, and Fisher (US 3,953,111 “Ex. 1006”). *Id.* at 30, 32, 36–39. Patent Owner filed an Amendment on February 12, 2015, canceling, *inter alia*, claim 17 and amending certain other claims. *Id.* at 19–25. At the conclusion of the reexamination proceeding, the Patent Office issued an *Ex Parte* Reexamination Certificate cancelling claims 1, 6, 7, 17–20, 22, 23, and 25; determining claims 2–4, 10, and 15 to be patentable as amended; determining claims 11 and 16 dependent on an amended claim to be patentable; and adding and determining to be patentable new claims 27–47. Ex. 1001, 25–27; Ex. 1003, 1–3.

*D. Claimed Subject Matter*

Challenged claim 21 incorporates the limitations of cancelled claim 17, from which it depends. *See* MPEP § 2260.01 (“the content of the canceled base claim . . . [is] available to be read as part of the confirmed or allowed dependent claim”). Both claims are reproduced below.

17. A panoramic objective lens comprising:

optical means for projecting a panorama into an image plane of the objective lens, the optical means having an image point distribution function that is not linear relative to the field angle of object points of the panorama, the distribution function having a maximum divergence of at least  $\pm 10\%$  compared to a linear distribution function, such that a panoramic image obtained by means of the objective lens comprises at least one substantially expanded zone and at least one substantially compressed zone.

Ex. 1001, 20:51–61.

21. The panoramic objective lens according to claim 17, wherein the lens compresses the center of the image and the edges of the image, and expands an intermediate zone of the image located between the center and the edges of the image.

Ex. 1001, 21:7–11.

*E. Evidence*

Petitioner relies upon the following prior art references in the asserted grounds of unpatentability:

Reference	Date	Exhibit No.
US 5,861, 999 (“Tada”)	Jan. 19, 1999, filed Aug. 21, 1997	1007
US 6,128,145 (“Nagaoka”)	Oct. 3, 2000, filed Apr. 28, 1999	1004
US 5,686,957 (“Baker”)	Nov. 11, 1997, filed Jun. 30, 1995	1005

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.