

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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LG ELECTRONICS INC.,  
Petitioner,

v.

IMMERVISION, INC.,  
Patent Owner.

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Case No. IPR2020-00179

U.S. Patent No. 6,844,990

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**PETITION FOR INTER PARTES REVIEW OF  
U.S. PATENT NO. 6,844,990  
CHALLENGING CLAIM 5**

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**EXHIBIT LIST**

<b><i>Exhibit Number</i></b>	<b><i>Description</i></b>
1001	U.S. Patent No. 6,844,990 to Artonne <i>et al.</i> (with Ex Parte Reexamination Certificate (10588th))
1002	Prosecution History of U.S. Patent No. 6,844,990
1003	Prosecution History of Reexamination No. 90/013,410 (without materials designated as nonpatent literature)
1004	U.S. Patent No. 6,128,145 to Nagaoka
1005	U.S. Patent No. 5,686,957 to Baker
1006	U.S. Patent No. 3,953,111 to Fisher, et al.
1007	U.S. Patent No. 5,861,999 to Tada
1008	Declaration of Russell Chipman, Ph.D.
1009	CV of Russell Chipman, Ph.D.
1010	Patent Owner's Initial Infringement Contentions in Case No. 1:18-cv-01631-MN-CJB (D. Del.) (Claim 5) [REDACTED]
1011	Patent Owner's Initial Infringement Contentions in Case No. 1:18-cv-01630-MN-CJB (D. Del.) (Claim 21)
1012	Excerpt from The American Heritage Dictionary of Science (1986)
1013	Data from Code V analysis of Tada's third embodiment performed by Dr. Russell Chipman

## I. INTRODUCTION

Pursuant to 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42.100 *et seq.*, Petitioner LG Electronics Inc. (“Petitioner”) hereby requests *Inter Partes* Review (“IPR”) of claim 5 of U.S. Patent No. 6,844,990 (“the ’990 Patent,” Ex. 1001).

The ’990 Patent was previously subject to an *ex parte* reexamination, which resulted in, among other things, cancellation of independent claim 1. Dependent claim 5 of the ’990 Patent, which is the only claim challenged in this IPR, was not the subject of the prior reexamination proceeding. Claim 5 depends from independent claim 1 and adds nothing more than a known variation to the panoramic objective lens used in the method of cancelled claim 1 to capture a digital panoramic image.

In particular, dependent claim 5 requires an objective lens that compresses the center and edges of an image and expands an intermediate zone located between the center and the edges of the image. But this very lens was disclosed in a reference not previously considered by the Office (U.S. Patent No. 5,861,999 to “Tada”, Ex. 1007), which forms the basis for Ground 1 (as well as partly forming the basis for Grounds 2 and 3). The remainder of Grounds 2 and 3 separately add two secondary references to address a numerical value mentioned in independent claim 1. In reexamination, however, the patent owner already effectively conceded that these secondary references anticipated independent claim 1. As explained in

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