UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE,
Patent Owner

Case No. IPR2021-00827
Patent No. 9,781,448

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBITS

Exhibit 2001	Declaration of Kayvan Noroozi in Support of *Pro Hac Vice* Admission
Exhibit 2002	Transcript of Deposition of Kevin Jakel, IPR2021-00275, March 16, 2021 (Redacted Public Version)
Exhibit 2003	Transcript of Deposition of Kevin Jakel, IPR2019-00194, August 23, 2019 (Redacted Public Version)
Exhibit 2004	Transcript of Deposition of Kevin Jakel, IPR2019-00482, October 15, 2019 (Redacted Public Version)
Exhibit 2005	Unified Press Release re: OPAL & OVAL
Exhibit 2006	Unified Proposal and Presentation (Redacted Public Version)
Exhibit 2007	Unified Proposal and Report (Redacted Public Version)
Exhibit 2008	Unified Press Release re ETRI Patent Challenged

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I. INTRODUCTION

Institution of the present Petition for *inter partes* review should be denied. The inventions described and claimed in the '448 patent relate to video coding, and the "intra prediction" aspect of video coding in particular. This is reflected in limitations of the Challenged Claims, for example, directed to a processor that performs "intra prediction," and when doing so, (1) "determines whether to apply a second filter to a prediction value of [a] current block" and (2) "applies the second filter to the prediction value of the current block" in accordance with the determination. EX1001, 12:19-21, 12:47-50.

Confronted with these limitations, the Petition was unable to identify prior art that actually filters a "prediction value" of a block *when* "intra prediction" is performed. Indeed, as explained in Section III.A below, "intra prediction" corresponds to a distinct phase of video coding that involves generation of "prediction values" for a prediction block. But in a transparent attempt to stretch the prior art onto the claimed inventions, the Petition disregards the requirement for the second filter to operate on a "prediction value" when intra-prediction is performed. In both Grounds 1 and 2, the Petition instead relies on a "deblocking filter 120" from *Moon* as allegedly providing the recited "second filter"—despite *Moon's* filter having an entirely different function of filtering "reconstructed" values outside of the "intra prediction" process. *Infra*, Sections V.A.1, V.B.1.

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