Paper No. \_\_\_\_ Filed: July 28, 2015

HUGHES NETWORK SYSTEMS, LLC and HUGHES COMMUNICATIONS, INC., Petitioner,

V.

CALIFORNIA INSTITUTE OF TECHNOLOGY, Patent Owner.

Case IPR2015-00059

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Patent 7,916,781

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



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## I. STATEMENT OF PRECISE RELIEF REQUESTED

Hughes Network Systems, LLC and Hughes Communications, Inc. (collectively, "Petitioner") filed a petition for *inter partes* review of claims 1-7, 13-16, and 19 of U.S. Patent No. 7,916,781 ("the '781 patent," Ex. 1005). The Board issued its decision instituting trial ("Decision," Paper 18) on only one ground of challenge and only with respect to two claims of the '781 patent. The ground of challenge on which trial was instituted alleges anticipation under 35 U.S.C. 102(b) of claims 1 and 2 by Divsalar (Ex. 1011).

The patent owner ("Caltech") hereby requests that the Board now dismiss the sole ground of challenge remaining in this *inter partes* review, so as to confirm claims 1 and 2 of the '781 patent as not unpatentable.

## II. INTRODUCTION AND OVERVIEW OF ARGUMENT

First, Caltech maintains that the petition fails to identify all real parties-in-interest ("RPI"). EchoStar Corporation ("EchoStar") has now been recognized by the Board as an RPI, yet Petitioner never identified EchoStar as such in the petition. As to the DISH parties ("DISH"), Hughes still has not rebutted evidence that DISH should have been named. Hughes misapprehends the relevant case law, and has been evasive with respect to discovery.

Second, the Petition fails to establish that the Divsalar reference, the sole reference at issue as the basis of the instituted ground, qualifies as a "printed publication" and prior art under 35 U.S.C. § 102(b) as asserted. Petitioner has never asserted, let alone established, that Divsalar was published at the Allerton conference, as mentioned in the institution Decision. Petitioner's witnesses



actually provide testimony to the contrary. The librarian declaration on which Petitioner relies to establish the publication date actually asserted provides no reliable basis for the testimony. Moreover, the declaration should be expunged because Petitioner was unwilling to provide the witness for cross examination.

Third, with regard to the sole remaining ground of challenge alleging anticipation, the claim construction advanced by Petitioner and adopted by the Board in the Decision is unduly broad in view of the specification. When the claims are properly construed, Divsalar fails to teach a "first encoding operation being a linear transform operation that generates L transformed bits," and "the second encoding operation including an accumulation operation in which the L transformed bits generated by the first encoding operation are accumulated."

### III. FAILURE TO NAME REAL PARTIES-IN-INTEREST

As explained in Caltech's preliminary response, the petition should be dismissed and the proceeding should be terminated because Petitioner failed to identify all real parties-in-interest as required by 35 U.S.C. § 312(a)(2) and 37 C.F.R. § 42.8(b)(1). Paper 13 pp. 3-14; Paper 16. The petition identifies only Hughes Network Systems, LLC and Hughes Communications, Inc. as real parties-in-interest. It at least fails to identify EchoStar, even though the Board recognizes that EchoStar is in fact a real party-in-interest. Decision p. 2 n.1. The petition also fails to identify DISH Network Corporation, DISH Network L.L.C. and dishNET Satellite Broadband L.L.C. (collectively, "DISH"), even though EchoStar and DISH are under common control. The existence of financially controlling interests, closely intertwined business relationships, overlapping ownership and



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