

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,

Petitioners,

v.

BRADIUM TECHNOLOGIES LLC,

Patent Owner.

CASE: IPR2016-00448

Patent No. 7,908,343 B2

UPDATED POWER OF ATTORNEY

Pursuant to 37 C.F.R. 42.10(b), Petitioner, Microsoft Corporation, hereby updates its Power of Attorney (Paper 2) by designation of Chun M. Ng as lead counsel. The following lead and back-up counsel are appointed to transact all business before the Patent Trial & Appeal Board of the United States Patent and Trademark Office in connection with an *Inter Partes* Review of U.S. Patent No. 7,908,343 B2 entitled "Optimized Image Delivery Over Limited Bandwidth

Updated Power of Attorney
Inter Partes Review of Patent No. 7,908,343 B2

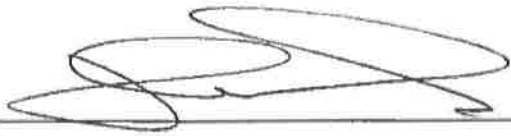
Communication Channels,” which, based on information and belief, is currently assigned to Bradium Technologies LLC.

LEAD COUNSEL	BACK-UP COUNSEL
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Updated Power of Attorney
Inter Partes Review of Patent No. 7,908,343 B2

The undersigned is authorized to sign this Power of Attorney on behalf of
the Petitioner.

Dated: 2/3/17



A handwritten signature in black ink, appearing to read 'D. Howard', is written over a horizontal line.

Name: David Howard
Title: Corporate Vice President and
Deputy General Counsel
Microsoft Corporation