

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MICROSOFT CORPORATION,

Petitioners,

v.

BRADIUM TECHNOLOGIES LLC,

Patent Owner.

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CASE: IPR2016-00449

Patent No. 8,924,506 B2

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**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. 8,924,506 B2 entitled "Optimized Image Delivery Over Limited Bandwidth

Updated Power of Attorney  
*Inter Partes* Review of Patent No. 8,924,506 B2

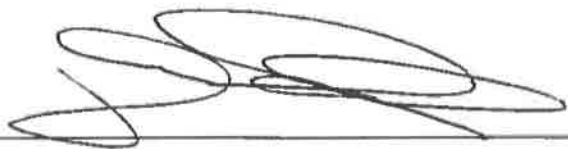
Communication Channels,” which, based on information and belief, is currently assigned to Bradium Technologies LLC.

LEAD COUNSEL	BACK-UP COUNSEL
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Updated Power of Attorney  
*Inter Partes* Review of Patent No. 8,924,506 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 'David Howard', is written over a horizontal line.

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