PUBLIC VERSION (NON-CONFIDENTIAL)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner

v.

BRADIUM TECHNOLOGIES LLC, Patent Owner

> CASE IPR2016–00449 Patent 8,924,506

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

PROTECTIVE ORDER MATERIAL



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Patent Owner Bradium Technologies LLC ("Patent Owner") hereby submits this Patent Owner's Response to the Petition filed by Microsoft Corporation ("Petitioner") in case IPR2016–00449 for review of claims 1–21 of U.S. Patent No. 8,924,506 (the "'506 patent").

I. INTRODUCTION

The Board instituted *inter partes* review on one ground: whether claims 1—21 are patentable over Reddy in view of Hornbacker. But the Board did not have the benefit of a full record, including the declarations of Dr. Peggy Agouris and of inventor, Mr. Isaac Levanon. Based on the complete record, the Board should affirm the patentability of all claims.

Reddy in view of Hornbacker does not teach or suggest all of the elements of the challenged claims of the '506 patent, including a limited bandwidth device or communications channel, processor selection of data parcels to provide for progressive resolution enhancement, queuing of data parcels on a remote computer (server) based on importance of the data parcel as determined by the server, and the '506 patent's efficient K_D, X, Y data structure. (Ex. 2003, ¶46.)

Hornbacker does not disclose all the elements which Reddy is lacking, including processor selection of data parcels to provide for progressive resolution enhancement, queuing of data parcels on a server based on importance of the data



parcel as determined by the server, and the efficient K_D , X, Y data structures of the '506 patent. Ex. 2003, $\P46-48$.

In any case, a POSA would not have combined Reddy and Hornbacker to arrive at the claimed invention. Ex. 2003, ¶¶48-64. A POSA would not consider a document-processing reference such as Hornbacker for GIS applications. Ex. 2003, ¶¶49, 111–117. Also, in addressing a bandwidth-limited situation, a POSA would not have looked to Reddy, either alone or in view of Hornbacker, because Reddy is specifically designed for a high-speed internet connection and is computationally complex and bandwidth intensive. See Ex. 2066, p.2 (proposal to build application over advanced NGI networks); Ex. 2003, ¶50–52, 62. Reddy is part of the Multidimensional Applications GigaBit (extremely high-speed) Internet Consortium (MAGIC) project. Ex. 1004, ¶38 and p.37 (Acknowledgements, showing funding by MAGIC II). A POSA would not have considered Reddy for a limited bandwidth environment and would not have applied Reddy to achieve the method and system described and claimed in the '506 patent. Ex. 2003, ¶50–52, 74, 123.

A POSA would also not have considered Hornbacker in a bandwidth-limited environment, especially in the context of a real-time or "fly over" application. Ex. 2003, ¶53–58, 61–62. Hornbacker discloses that the server custom-calculates tile views of an image. In response to a user request, and based on the particular angle



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