

*Bradium Techs. LLC v. Microsoft Corp.*, No. 15-cv-31-RGA (D. Del.)  
 INITIAL CLAIM CHART, PURSUANT TO SCHEDULING ORDER (D.I. 43, 1.e)

**Microsoft Bing Maps, Bing Search, and Bing Maps Preview**<sup>1</sup>

Ref. No.	Claim	U.S. Patent No. 8,924,506 <sup>2</sup>	Microsoft Bing Maps, Bing Search, and Bing Maps Preview <sup>3</sup>
1	1	A method of retrieving large-scale images over network communications channels for display on a limited communication bandwidth computer device, said method comprising:	As explained below, Bing Maps, operating on an Android device, such as a smart phone, requests, receives, and displays Bing Maps map tiles based on a user’s image viewpoint. Further, as explained below, Microsoft servers process Bing Maps map tiles in an infringing manner.  To the extent the preamble is limiting, <sup>4</sup> Bing Maps as accessed via an Android device provides a method of retrieving large-scale images over network communications channels for display on a limited communication bandwidth computer device.  Bing Maps provides and displays, for example, a world map that users can directly manipulate and zoom. <i>E.g.</i> , Joe Schwartz, <i>Bing Maps Tile System</i> , MICROSOFT, <a href="https://msdn.microsoft.com/en-us/library/bb259689.aspx">https://msdn.microsoft.com/en-us/library/bb259689.aspx</a> (last visited Apr. 29, 2016) (“ <i>Bing Maps Tile System</i> ”).

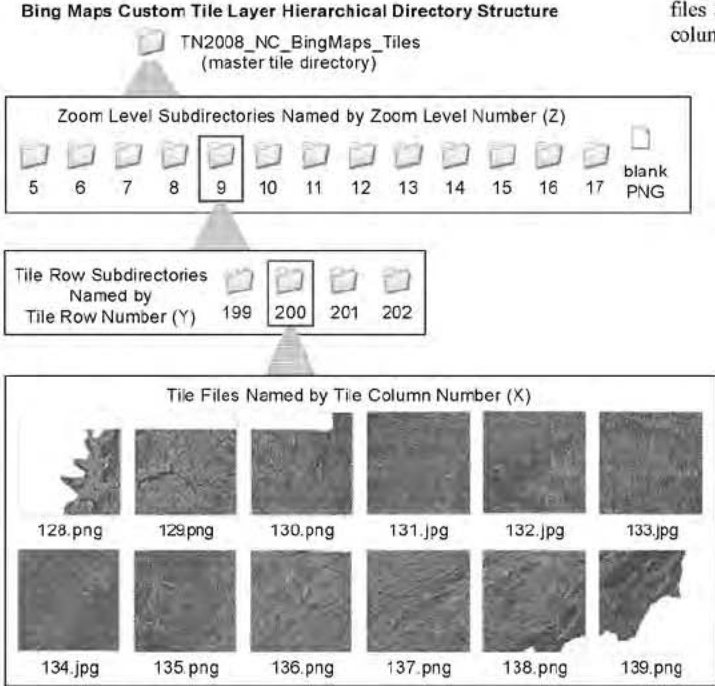
<sup>1</sup> These charts are initial claim charts. Bradium is engaged in ongoing discovery and reserves the right to supplement or amend these charts as the case develops. Microsoft has yet to provide any version information on the accused products, despite Bradium’s requests served on February 9, 2016. Microsoft has further provided inadequate core technical documents to describe the functionality of all of the Accused Products. Bradium has not yet had an opportunity to review source code. Therefore, Bradium provides a representative chart.

<sup>2</sup> This chart also applies to related U.S. Patent Publication No. 2011/0175914. The claims of Publication No. US 2011/0175914 are substantially identical to the claims of the ’506 patent.

<sup>3</sup> This chart uses an Android device for exemplary purposes, but the chart also applies to all other implementations of the Accused Products during the damages period, including without limitation all versions of Bing Maps as accessed, for example, on an Android, iOS, Windows, or other mobile device, all versions of Bing Search, including, for example as an application or website on an Android, iOS, Windows, or other mobile device, and **all versions of the Bing Maps Preview app, operating, for example, as a Microsoft Windows application.** This chart includes the Accused Products operating as a first party website or application and as operating through the website or application of a Microsoft customer who has contracted to use Bing Maps, for example by using a Bing Maps API or registering as a b2b Bing Maps client.

<sup>4</sup> Bradium takes no position in its Initial Claim Charts as to whether any particular portion of a claim is limiting. This applies throughout all claims.

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			<div style="text-align: right; margin-bottom: 5px;"> <small>name: files: column:</small> </div>  <p style="font-size: small;">       Directory structure for a Bing Maps Custom Tile Layer created in TNTmips using the Automatic option for Tile Format, which creates JPEG files for interior tiles and PNG files for edge tiles to provide transparency for non-image areas. This tile layer includes zoom levels 5 through 17. Tiles are stored in nested subdirectories, first by zoom level number and then by tile row number. Individual tile files are named by tile column number.     </p> <p> <i>See also, e.g.,</i> MSFT-BRAD-0001031 at 2 (0001032) (describing a “custom tile layer,” which can be stored by level of detail, tile row, and tile column).     </p>
13	8	A display system for displaying a large-scale image retrieved over a limited bandwidth communications	To the extent the preamble is limiting, a display system (for example on an Android device) in combination with Bing Maps provides a system for displaying large-scale images retrieved over limited bandwidth communications channels. Microsoft induces infringement of this system because Microsoft has intended, and continues to intend, to cause end users to use at least Bing Maps in a manner covered by one or more claims of the

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		<p>channel, said display system comprising:</p>	<p>'343 patent.</p> <p>Bing Maps provides and displays, for example, a world map that users can directly manipulate and zoom. <i>E.g.</i>, Joe Schwartz, <i>Bing Maps Tile System</i>, MICROSOFT, <a href="https://msdn.microsoft.com/en-us/library/bb259689.aspx">https://msdn.microsoft.com/en-us/library/bb259689.aspx</a> (last visited Apr. 29, 2016) (“<i>Bing Maps Tile System</i>”).</p> <p style="text-align: center;"> <b>Folders, Tiles, and File Size by Zoom Level            for a Sample Bing Maps Custom Tile Layer            (1-m Orthoimage Mosaic of a US State)</b>  <small>(see Technical Guide entitled  <i>Tilesets: Understanding Sizes</i>)</small> </p> <p> <b>Source image size:</b> 352 GB (uncompressed)  <b>Image area:</b> 109,185 square kilometers  <b>Tile Size:</b> 256 x 256 Pixels (required)  <b>Tile Formats:</b> JPEG + PNG for edge tiles         </p> <p><i>See also, e.g.</i>, MSFT-BRAD-0001031 at 3 (0001033) (appearing to show image data size for a sample source image of the United States).</p> <p>Microsoft provides and displays Bing Maps through, for example, a web browser for use on a user computing device such as an Android device connected to a network communication channel such as, for example, the Internet.</p>

