

May 10, 2017

Matthew Bernstein, Esq.  
Perkins Coie, LLP  
11988 El Camino Real, Suite 350  
San Diego, CA 92130-2594

Dear Matt:

Further to my letters dated March 23, 2017, in which I informed Microsoft that three new Bradium patents would soon be issued by the U.S. Patent Office, I write to inform Microsoft that the patents have now been issued. In particular, U.S. Patent 9,635,136 issued on April 25, 2017, U.S. Patent 9,641,644 issued on May 2, 2017, and U.S. Patent 9,641,645 issued on May 2, 2017. Copies of all three patents are attached. As further stated below, Bradium believes that Microsoft is infringing all three patents. I also write to address some of the comments in your letter dated April 20, 2017, which you wrote in response to my March 23, 2017, letters.

**Notice of Infringement of U.S. Patent Nos. 9,635,136, 9,641,644, and 9,641,645**

Bradium believes that Microsoft has been infringing, and continues to infringe, one or more claims of U.S. Patent Nos. 9,635,136 (the “’136 patent”), 9,641,644 (the “’644 patent”), and 9,641,645 (the “’645 patent”). Microsoft has been on notice regarding these patents at least since the date of my March 23, 2017, letters.

Based on its current investigation, Bradium identifies claim 10 of the ’136 patent, claim 23 of the ’644 patent, and claim 1 of the ’645 patent as examples of infringed claims. Bradium further identifies as infringing products at least those products noted in my March 23, 2017, letters.

Bradium intends to seek the Court’s authorization to add these newly-issued patents to the litigation entitled *Bradium Technologies LLC v. Microsoft Corporation* (D. Del. 15-0031-RGA), as soon as the Court permits.

**Contentions in Your Letter Dated April 20, 2017**

**1. Microsoft’s Invalidity Contentions**

Your letter attacks the US Patent Office for allowing Application No. 14/970,526, now issued as the ’644 patent, which is surprising given that the Examiner was provided with and

carefully considered Microsoft's arguments and asserted prior art. In addition, your letter mischaracterizes the Examiner's statement of the basis for allowing the patent. The Examiner specifically stated in allowing Claims 1-65 that "[w]hen considering **the claims as a whole, particularly how these elements interact with the claimed update parcels**, the claims are found to be novel and non-obvious over the prior art." Notice at Page 2, Paragraph 4 (emphasis added). Microsoft's arguments regarding the alleged errors of the Patent Office are unsupported by the evidence and therefore frivolous.

Your letter also persists in attacking the validity of the '794 patent, which is one the patents already in suit, not one of the new patents. Microsoft's continued attack on the patent is also surprising, given that Microsoft challenged the patent in the Patent Office, received a fair hearing, and lost. Further, we note that Microsoft abandoned its appeal to the Federal Circuit on this patent, an admission of defeat on the merits.

## 2. Microsoft's Contentions Regarding Its Infringement

Your letter does not deny that Microsoft infringes the new patents, and instead attacks Bradium for not providing detailed infringement contentions. Your letter misconstrues the purpose of Image Processing's March 23, 2017, letters, which was to provide Microsoft with notice of the expected issuance of the patents and of Bradium's allegations of infringement. As your letter implicitly acknowledges, Microsoft is well aware that it infringes the new patents as well as the previously-issued patents that are asserted in the lawsuit. As you also well know, Bradium has already detailed the evidence of such infringement in its 101 pages of infringement contentions served on Microsoft in the pending lawsuit. Those contentions were provided after Microsoft was required under Court order to make the code for its software available to Bradium for review. Again, Microsoft's position is frivolous.

Microsoft's further contention that it does not infringe the '794 patent, which is not one of the new patents, is also without basis. Microsoft's infringement is clearly demonstrated in the detailed infringement contentions provided in the litigation.

## Microsoft's Contentions Regarding Unenforceability

Your letter continues in the same vein to make baseless and scurrilous accusations that the patents are "unenforceable." As you know, the individual who made these accusations refused to show up for his deposition where his statements could be tested under oath. Microsoft's continued reliance on these baseless accusations is shameful and indicative of its weak position.

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As requested in the March 23, 2017, letters, Bradium demands that Microsoft cease and desist from its infringement of the newly issued patents, as well as the earlier patents that are already the subject of the lawsuit.

Very truly yours,



Michael Zachary

Enclosures



(12) **United States Patent**  
**Levanon et al.**

(10) **Patent No.:** **US 9,635,136 B2**  
(45) **Date of Patent:** **\*Apr. 25, 2017**

(54) **OPTIMIZED IMAGE DELIVERY OVER LIMITED BANDWIDTH COMMUNICATION CHANNELS**

(71) Applicant: **Bradium Technologies LLC**, Suffern, NY (US)

(72) Inventors: **Isaac Levanon**, Raanana (IL); **Yonatan Lavi**, Raanana (IL)

(73) Assignee: **BRADIUM TECHNOLOGIES LLC**, Suffern, NY (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/343,052**

(22) Filed: **Nov. 3, 2016**

(65) **Prior Publication Data**

US 2017/0054830 A1 Feb. 23, 2017

**Related U.S. Application Data**

(63) Continuation of application No. 15/281,037, filed on Sep. 29, 2016, which is a continuation of application (Continued)

(51) **Int. Cl.**  
**G06F 15/16** (2006.01)  
**H04L 29/08** (2006.01)

(Continued)

(52) **U.S. Cl.**  
CPC ..... **H04L 67/327** (2013.01); **G06F 3/14** (2013.01); **G06T 3/4092** (2013.01); **G09G 5/003** (2013.01);

(Continued)

(58) **Field of Classification Search**  
CPC .... H04N 1/40068; H04N 1/4172; H04N 1/64; H04N 21/234345; H04N 21/234363;  
(Continued)

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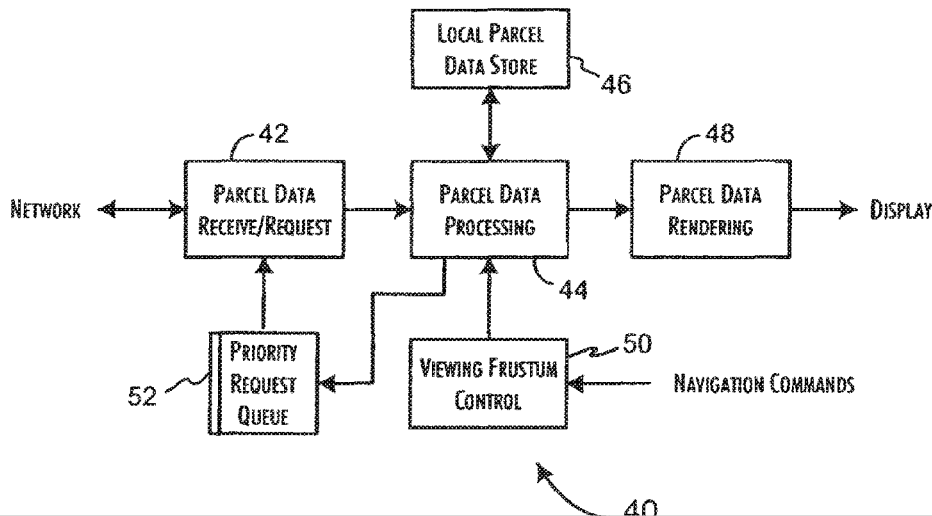
*Primary Examiner* — David Lazaro

(74) *Attorney, Agent, or Firm* — Anatoly S. Weiser, Esq.; Techlaw LLP.

(57) **ABSTRACT**

Large-scale images are retrieved over network communications channels for display on a client device by selecting an update image parcel relative to an operator controlled image viewpoint to display via the client device. A request is prepared for the update image parcel and associated with a request queue for subsequent issuance over a communications channel. The update image parcel is received from the communications channel and displayed as a discrete portion of the predetermined image. The update image parcel optimally has a fixed pixel array size, is received in a single and or plurality of network data packets, and were the fixed pixel array may be constrained to a resolution less than or equal to the resolution of the client device display.

**27 Claims, 5 Drawing Sheets**



**Related U.S. Application Data**

- No. 14/970,526, filed on Dec. 15, 2015, which is a continuation of application No. 14/547,148, filed on Nov. 19, 2014, now Pat. No. 9,253,239, which is a continuation of application No. 13/027,929, filed on Feb. 15, 2011, now Pat. No. 8,924,506, which is a continuation-in-part of application No. 12/619,643, filed on Nov. 16, 2009, now Pat. No. 7,908,343, which is a continuation of application No. 10/035,987, filed on Dec. 24, 2001, now Pat. No. 7,644,131.
- (60) Provisional application No. 60/258,465, filed on Dec. 27, 2000, provisional application No. 60/258,466, filed on Dec. 27, 2000, provisional application No. 60/258,467, filed on Dec. 27, 2000, provisional application No. 60/258,468, filed on Dec. 27, 2000, provisional application No. 60/258,488, filed on Dec. 27, 2000, provisional application No. 60/258,489, filed on Dec. 27, 2000.
- (51) **Int. Cl.**  
*G06T 3/40* (2006.01)  
*G06F 3/14* (2006.01)  
*G09G 5/00* (2006.01)  
*G06T 11/60* (2006.01)  
*G06T 15/04* (2011.01)  
*G06F 17/24* (2006.01)  
*G06T 19/00* (2011.01)
- (52) **U.S. Cl.**  
 CPC ..... *G06F 17/241* (2013.01); *G06T 11/60* (2013.01); *G06T 15/04* (2013.01); *G06T 19/003* (2013.01); *G06T 2207/10032* (2013.01); *G09G 2350/00* (2013.01); *G09G 2370/02* (2013.01); *G09G 2370/16* (2013.01)
- (58) **Field of Classification Search**  
 CPC ..... H04N 21/25825; G06F 17/30241; G06F 3/04815; G06T 3/4092; G06T 19/003  
 USPC ..... 709/202, 203, 217, 218, 230, 231; 382/305, 232; 345/428, 581, 625  
 See application file for complete search history.
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