IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION Petitioner

V.

SURFCAST, INC. Patent Owner

Case IPR2013-00292 Patent 6,724,403

Declaration of Ovid Santoro

DECLARATION OF OVID SANTORO

I, Ovid Santoro declare and state as follows:

- 1. I am a citizen of the United States and I am more than twenty-one years of age.
- 2. I am one of the inventors of the inventions described and claimed in U.S. Patent No. 6,724,403 ("the '403 patent) which is currently the subject of the above captioned *Inter Partes* Review.
- 3. I am currently the President and Chairman of SurfCast, Inc. and am providing services in connection with this *Inter Partes* Review.
- 4. I re-affirm my duty of candor and good faith in dealing with the United States Patent and Trademark Office ("USPTO"), including the duty to disclose to the USPTO all information known to be material to the patentability of the invention, as defined in 37 C.F.R. § 1.56.
- 5. I have read and I am familiar with the '403 patent, and the Decision by the Patent Trial and Appeal Board instituting *inter partes* review, dated November 19, 2013.
- 6. I understand that grounds for the *inter partes* review included anticipation of claims 1-13, 17-28, 30-33, 35-37, 39-43 and 46-50 by U.S. Patent No. 6,456,334 to Duhault ("Duhault II"), which was filed on June 29, 1999.

- 7. Because my coinventor, Klaus Lagermann, and I conceived of the inventions recited in at least independent claims 1, 22, and 46, and also dependent claims 2, 3, 5-9, 12, 17-21, 23-28, 30, 32-33, 35-37, 39-41, 47, and 48 of the '403 patent prior to June 29, 1999, and because we worked diligently to reduce the invention to practice, I am submitting this declaration to antedate U.S. Patent No. 6,456,334 to Duhault.
- 8. In the late 1990's I was employed by Deutsche Bank until I resigned full-time employment with the bank on 31st Dec. 1999 (yet remained a consultant to Deutsche for a couple of years) to start SurfCast, Inc., which opened its offices on the first Monday in January 2000. My primary responsibilities at Deutsche bank in the late 1990s time-frame was to evaluate young technology companies for potential investment by the bank. While at Deutsche Bank I was given permission by senior executive management to whom I reported (group executive committee member of Deutsche Bank), to work on establishing SurfCast as a company as well as developing its patent and technology designs. Otherwise, during the course of 1999, when not engaged in SurfCast business, I was winding down my business for Deutsche Bank.
- 9. Prior to June 29, 1999, I had an idea for a new user interface. I was sitting at my computer and was frustrated I could not get everything I wanted -- all of the content and information -- from one view. At the time, a user had to

open a variety of programs to view different kinds of information, such as a web browser for stock quotes, another web browser for news, a word processing program for documents, and a media player for music or video. I had an idea for a single computer screen to access all the things I wanted in one place. I sent my coinventor, Klaus Lagermann, an email about the idea, and we ultimately over the next several months had many conversations (often daily), and exchanged hundreds of emails about the idea, specifically its design, how to develop the idea, and how to make a product that implemented the idea.

- 10. Exhibits 2024 2029 and 2036 are true and correct copies of the emails exchanged between myself and Klaus Lagermann prior to June 29, 1999, and accurately reflect my thoughts and ideas from that time frame. I have maintained these records of SurfCast in safekeeping without alteration since the time they were created as business records of SurfCast, along with the additional documents identified below.
- 11. Prior to June 29, 1999, my coinventor and I developed an idea for a user interface similar to what was commonly referred to in the television industry as an "electronic program guide," or EPG, but ours had many more features and the ability to display and manage more than television content (such as Internet content, music, photos, chat, etc.. The interfaces that existed at the time to access multiple sources of information, such as web content,

included portals through services such as Yahoo! and AOL. These portals, however, were not easily customizable to the content I wanted as a user, and typically served content from advertisers rather than content chosen by me. I wanted to see, on one screen, what I wanted to see, such as the New York Times, Wall Street Journal, Economist, eBay auctions, shopping on Amazon, television, and a live ski report—all in one place—not what Yahoo! wanted me to see. My coinventor and I realized that users want to have one place to access all the sources of information they want. We envisioned a single computer screen divided into multiple dynamic, miniaturized 'mosaics' of content that were selected by the user. And whatever the state of tiles when a user logs-off, it is the same state when they log-on again: the user's tiles will be in the same position in the grid. These features are shown in Exhibits 2024 – 2029 and 2036.

12. As described in the emails at Exhibits 2024 – 2029 and 2036, each dynamic mosaic, or mini-screen, could display any kind of content, such as from websites or real-time streaming channels of content, and could be associated with any kind of source of information or datastream as we called them. At the time, the user typically had to "click" on each window to view updated information from the information source. But each mosaic, or mini-screen, on our new user interface would be updated without the user having to intervene

and 'go somewhere' and leave the desktop. The user could therefore see simultaneously, in one screen, updating information from all the information sources they wanted, regardless of the type of information source. One embodiment of our user interface included storing the user's "screen" on a server such that the user could get their chosen information faster and from anywhere (from any location, and importantly from any device). These features are shown in Exhibits 2024 – 2029 and 2036.

13. Prior to June 29, 1999, my coinventor and I met in London to discuss how to implement the idea we had developed for a new user interface. Dixon Chan Dick also joined us as he was knowledgeable about server and networking technology that we thought would be helpful to implement our idea. During this brainstorming session we created a series of whiteboard "flip charts" to document our ideas for implementing the new user interface. Photographs of these flip charts, taken during our meeting, are reproduced at Exhibit 2041. During the time of this meeting, I also wrote certain notes based on our discussions and the flip charts, and copied down what we had written on the flipcharts, in a paper notebook. Exhibit 2023, is a true and correct copy of this notebook, which accurately reflects our discussions and ideas from the meeting prior to June 29, 1999. The contents of the notebook have not been altered since they were written in 1999, and I maintained the notebook as a business

record of SurfCast, like I maintained all records of SurfCast, including those referenced herein. I found this notebook among my SurfCast records.

14. As shown in Exhibits 2023 and 2041, prior to June 29, 1999, my coinventor and I had in mind a graphical User Interface with elements called tiles. These are what we had called the "mosaics" or "mini-screens" in our emails referenced above. According to the invention, when a user turned on their computer the first thing they would see would be a single screen divided into a number of tiles. These tiles could be organized into a grid such that the tiles sat on top of or replaced what was known at the time as the user's desktop. Our graphical user interface was device independent; the grid of tiles could be displayed on a PC, phone, television or PDA. According to our invention, each tile was configurable, or programmable, and could be associated with different types of channels or datastreams, such as websites, TV Channels, a photo album, or individual files (such as a word processing or spreadsheet file), or programs, such as a word processing programming or spreadsheet application, or even a separate operating system, such as Windows. The user could choose which type of channel, or source of information, to have represented or associated with a tile such that the grid of tiles showed what the user wanted, all in one screen. These features are shown in Exhibits 2023 and 2041.

- 15. According to the invention we had in mind prior to June 29, 1999, each tile was capable of being animated to refresh its displayed content such that the displayed information was "active" or "live". For example, a tile associated with a TV stream could refresh at 29 frames per second, or every channel could be refreshed once a minute. The tiles could therefore be assigned a single refresh rate uniformly, or also have different refresh rates. In one embodiment, one of the tiles could randomly change every 5, 10, or 15 seconds. A tile could be updated with information such as from a file, document, image, website, or TV channel. These features are shown in Exhibits 2023 and 2041.
- example, when the user double-clicked on the tile, the user / system would navigate to the application or file associated with the tile. In some embodiments, the tiles were configurable to be clickable such that, for example, in response to a right mouse button click the tile would refresh, or on mouseover the tile would expand. One embodiment of our invention included a server that stored a user's tiles, and a user's grid of tiles could be retrieved from a database or server and downloaded onto the user's various devices. In one embodiment the programs the user wanted were also stored on the server and downloaded with the user's tiles. Thereby, the user's device would not need to have any excess programs or

operating system they did not want or need. These features are shown in Exhibits 2023 and 2041.

17. Prior to June 29, 1999, my coinventor and I collaborated to build a company and a product based on our grid and tile User Interface idea. The company and the product were called "SurfCast." On several occasions prior to June 29, 1999, my coinventor and I collaborated to draft and revise written summaries of our work on the SurfCast software product to implement our invention. Certain of these summaries that are relevant to the claims of the '403 patent are attached to this declaration as Exhibits 2037 and 2038, which are true and correct copies of different versions of the descriptions we created at the time. These written summaries are dated prior to June 29, 1999 and were maintained by me as a business record of SurfCast. Also attached as Exhibit 2067 is a true and correct copy of an email and attachment from myself to Klaus Lagermann, sent before June 29, 1999, including a version of this document. Attached as Exhibit 2068 is a true and correct copy of another email and attachment from myself to Klaus Lagermann, sent before June 29, 1999, including a version of this document. Exhibit 2009 is a true and correct copy of a letter from Andrew Gray, dated prior to June 29, 1999 and which I received on or around that date. This letter references a presentation I made, prior to June 29,

1999, to Andrew Gray and Brett Lovejoy of Pennie & Edmonds of a disclosure document similar to, or the same as, those in the attachment to Exhibit 2067.

- 18. Features of the invention of the '403 patent to be implemented in the SurfCast software included a dynamic graphical user interface comprising a PC screen divided into a grid of tiles that covered the entire screen. Each of the tiles had configurable properties, which could be configured by the user, including a refresh rate and various "clickable" properties, and also the size of the grid. The grid of tiles had some features in common with wallpaper, except the tiles resided on top of the typical windows based operating system, replacing the desktop. The tiles had some attributes similar to a desktop shortcut or bookmark, but tiles are different because they are animated (graphic versus textual) and can display refreshed information. The SurfCast tile user interface could service multiple different types of content and networks, including files, applications, web sites, TV channels, and broadband channels. The SurfCast software was envisioned to be device independent, although it was initially designed to run on a PC and a mobile telephone. These features are shown in Exhibit 2037.
- 19. Attached as Exhibit 2065 is chart prepared at my direction, showing, element-by-element, where each element of the independent claims, and certain of the dependent claims of the '403 patent are reflected in the documents of Exhibits 2036, 2023, and 2067, described above, which are all

dated before June 29, 1999. All of the entries listed in the chart are based on emails sent to or from me, my notes, and descriptions drafted or revised by me of our tile User Interface invention, which I carefully reviewed to refresh my recollection of those events. The dates and identification of the feature described in the Exhibits provided in the chart were prepared to the best of my recollection after reviewing these materials.

- 20. Prior to June 29, 1999 (as early as February 1999) I discussed the SurfCast product and company, along with the intention of my coinventor and I to obtain a patent for our tile User Interface invention, with Tom Dechaene, my partner at Deutsche Bank and one of the co-founders of SurfCast who would focus on the company's finance and operations. On several occasions throughout the period of June 29, 1999 through October 29, 1999 I consulted with Mr. Dechaene regarding the preparation of the patent application.
- 21. On several occasions prior to June 29, 1999, I consulted with attorneys at Pennie & Edmonds in preparation for filing a patent application on the tile User Interface invention. Exhibit 2033 is a true and correct copy of the fax cover sheet, dated April, 1999, and attached signed copy of the engagement letter, to include patent services, to Pennie & Edmonds. Klaus, my coinventor, and I also consulted on several occasions with attorneys at Pennie & Edmonds between

June 29, 1999 and the filing on October 29, 1999 of the provisional application to which the '403 patent claims priority.

- 22. Based on my own first-hand knowledge, the present invention was diligently reduced to practice from at least the period starting June 29, 1999 until October 29, 1999, the filing date of the provisional application to which the '403 patent claims the benefit. I am informed that filing the provisional application constituted a constructive reduction to practice of the invention. During that time period, in addition to my work and that of my coinventor, the provisional application was being prepared by outside counsel, reviewed by the inventors and other co-founders and advisors of SurfCast, and approved by the inventors for filing, as described in greater detail below.
- 23. My work in the time frame June 29, 1999 to October 29, 1999 with regard to SurfCast generally encompassed two responsibilities. First, my coinventor and I divided the duties in developing the SurfCast business and product based on our User Interface inventions such that I was primarily responsible for corporate strategy and raising financing, and he was responsible for developing the technology we designed. Second, my coinventor and I both shared the responsibility for the vision and designs of our technology and worked together with attorneys at Pennie & Edmonds to obtain a patent for our inventions.

- 24. On or about July 5, 1999 I collaborated with my coinventor to draft a business plan document, which mainly consisted of a bullet point list of topics at the time, for SurfCast that included a description of the SurfCast product we intended to implement an embodiment of our tile User Interface invention. Exhibit 2045 is a true and correct copy of this document, which I understand includes metadata information that the document was last modified July 7.
- 25. On or about July 7 and July 8, 1999, I collaborated with my coinventor to draft product description, product development schedule, and planning and development process documents for the SurfCast product that we intended to implement features of our tile User Interface invention. Exhibit 2043 to my declaration is a true and correct copy of the product description document, which included metadata information regarding a creation date of July 7, 1999. Exhibit 2044 is a true and correct copy of the product development schedule, which included metadata information regarding a creation date of July 7, 1999. Exhibit 2047 to my declaration is a true and correct copy of the overview document, which included metadata information regarding a creation date of July 8, 1999.
- 26. On or about July 15, 1999, I drafted a business plan document that included a description of our SurfCast product that we intended to implement an

embodiment of our tile User Interface Invention. Attached as Exhibit 2046 is a true and correct copy of this document.

- 27. On July 16, 1999, I discussed with Andrew Gray, an attorney at Pennie & Edmonds, preparation of the patent application for our tile User Interface invention. Also, I received a bill on behalf of SurfCast on or about August 14, 1999, reflecting legal work done for the patent application in July of 1999, including the telephone conference of July 16, 1999. Exhibit 2049 is a true and correct copy of this bill for legal services, which I understand has been redacted to remove attorney-client privileged communications.
- 28. On July 20 and July 21, 1999, I met with attorneys at Pennie & Edmonds to discuss the preparation of the patent application for our tile User Interface invention.
- 29. On July 28 and July 29, 1999, I met with my cofounder, Tom Decheane, and attorneys from Pennie & Edmonds to discuss the preparation of the patent application for our tile User Interface invention.
- 30. On August 9 and August 10, 1999, I exchanged emails with attorney Andrew Gray at Pennie & Edmonds, and my coinventor Klaus Lagermann regarding obtaining a patent on our tile User Interface inventions. Attached as Exhibit 2012 is a true and correct copy of these emails.

- 31. On August 11, 1999 I met with Richard Bone of Pennie & Edmonds to discuss the preparation of the patent application for our tile User Interface invention.
- 32. On August 19, 1999 I confirmed with my coinventor, Klaus Lagermann, that description of our tile User Interface invention was sent to Richard Bone at Pennie & Edmonds for preparation of our patent application. Exhibit 2019 is a true and correct copy of an email string including an email, dated August 19, 1999, I received from Klaus Lagermann on this subject.
- 33. On or about August 22, 1999 I drafted a document that included a description of the SurfCast product my coinventor and I intended to implement features of our tile user interface invention. Exhibit 2034 is a true and correct copy of an email I sent to Paul DeStefano at Pennie & Edmonds attaching this description. I understand that this document has been redacted to remove privileged attorney client communications.
- 34. On or about August 25, 1999, I drafted a description of the SurfCast invention to submit to Pennie & Edmonds, which I sent to my coinventor Klaus Lagermann for his review and comment. Exhibit 2031 is a true and correct copy of the email including this description as sent to Mr. Lagermann and his response.

- 35. On August 26, 1999 I revised a description of the SurfCast product that we intended to implement an embodiment of the tile User Interface invention. Exhibit 2013 is a true and correct copy of an email I sent to my coinventor Klaus Lagermann discussing my work on the description document.
- 36. In September 1999 I collaborated with my coinventor to draft a business plan document that described, among other things, the SurfCast product we intended to implement an embodiment of our tile User Interface invention. Exhibit 2039, dated September 1999, is a true and correct copy of a draft of this business plan document. Exhibit 2040, which references financing planned to be completed through September 1999, is a true and correct copy of a draft of this business plan document. At this time, we were closing the financing, beginning to recruit advisory board members, developers, other employees, engaging with infrastructure providers (office landlords, telecoms, etc.), engage with corporate lawyers, tax advisors, as well as continue to work on the patent and technology designs.
- 37. On September 7, 1999 I sent a description document of the SurfCast product that we intended to implement an embodiment of our tile User Interface invention to my coinventor, Tom Dechaene, and Paul DeStefano at Pennie & Edmonds. Exhibit 2014 is a true and correct copy of this email which

I understand the attachment has been redacted for privileged attorney client communications.

- 38. On September 9, 1999, I conferred with my coinventor regarding how our tile User Interface Inventions, and particularly as embodied in the SurfCast Product would be different from products then on the market. Exhibit 2032 is a true and correct copy of an email I sent September 9, 1999 to my coinventor on this subject.
- 39. On September 19, 1999 I sent an email to Paul DeStefano and Andrew Gray at Pennie & Edmonds, along with my coinventor and Tom Dechaene, regarding preparation of the patent application. Exhibit 2015 is a true and correct copy of this email, which I understand has been redacted for privileged attorney client communications.
- 40. On September 20, 1999 I sent an email to Paul DeStefano and Andrew Gray at Pennie & Edmonds regarding potential prior art for the patent application. Exhibit 2016 is a true and correct copy of this email, which I understand has been redacted for privileged attorney client communications.
- 41. On October 6, 1999, I met with attorneys from Pennie & Edmonds, with my coinventor attending via speakerphone, to discuss the preparation of the patent application for our tile User Interface invention.

- 42. On October 12 and October 13, 1999, I discussed the preparation of the patent application for our tile User Interface invention via telephone with attorneys at Pennie & Edmonds and my coinventor.
- 43. On or about November 16, 1999 I received a bill for legal services from Pennie & Edmonds reflecting legal work done for the patent application in the month of October 1999, including details of the person who performed the work and the date and description of work performed. Exhibit 2010 is a true and correct copy of the bill received, which includes a time entry at page 10 for Andrew Gray on October 14 referencing a conversation between Andrew Gray and Richard Bone regarding preparation of the patent application.
- 44. On or about October 19, 1999 I coordinated review and comment on a draft of the patent application by our co-founder and chairman of our advisory board, Bob Carberry. Exhibit 2017 is a true and correct copy of an email string dated October 19, 1999 to coordinate Mr. Carberry's review of the draft application.
- 45. On or about November 1, 1999, I received a bill from Pennie & Edmonds reflecting legal work done for the patent application in the month of September 30, 1999, including details of the person who performed the work and the date and description of work performed. Exhibit 2050 is a true and

correct copy of this bill, which I understand has been redacted to remove attorney-client privileged communications.

46. Based on information and belief, and my own knowledge after reviewing all of the available evidence, all of the above actions took place in either the United Kingdom or the United States.

Maa

47. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: _	24th January, 2014	By:	A JAPA	
		Ovid Santoro		