

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Microsoft Corporation and Microsoft Mobile, Inc.,
Petitioner,

v.

Global Touch Solutions, LLC,
Patent Owner.

IPR2015-01149
U.S. Patent No. 7,329,970

MICROSOFT EXHIBIT 1020

**SECOND DECLARATION OF MARK HORENSTEIN REGARDING
U.S. PATENT NO. 7,329,970**

I, Mark N. Horenstein, declare as follows:

1. My name is Mark N. Horenstein. I am the same Mark N. Horenstein who signed and submitted a declaration on May 12, 2015 in this proceeding regarding U.S. Patent No. 7,329,970 (the “’970 patent”).

2. I have reviewed the Patent Owner’s Response and related exhibits, as well as the deposition transcript of Patent Owner’s expert, Dr. Robert E. Morley (Ex. 1017). Nothing expressed in either of these documents changes my opinion that claims 1, 3-5, 10-14, 19, 48, 49, 51, and 52 of the ’970 patent are rendered obvious by Ex. 1004 (Jahagirdar) and Ex. 1005 (Schultz).

3. Dr. Morley asserts that Jahagirdar’s display element 516 is not a “luminous visible location indicator” because it does not help the user to locate the phone. I disagree with this assessment and note that regardless of whether the indicator is helping the user locate the phone as a whole at any particular moment, the indicator will always help the user to locate a particular part of the device, such as the user interface, the electronic module, or the indicator itself.

4. Dr. Morley indicates in his Declaration and Deposition that touch sensors such as those taught by Schultz would have decreased accidental actuation by inanimate objects such as clothes, objects in a bag, surfaces of furniture, and so forth. Ex. 1017 (Morley Tr.) at 157:20-158:23; *See also* Ex. 2006 (Morley Decl.) at ¶82. I agree with Dr. Morley’s assessment that incorporating Schultz’s touch

sensor into Jahagirdar's phone would have alleviated the problem of accidental actuation by inanimate objects. I further note that, although I disagree with his assessment, even if Dr. Morley is correct that Schultz's touch sensor would have increased the likelihood of accidental actuation by animate objects such as a hand, one of ordinary skill still would have sought to combine Schultz and Jahagirdar in order to reduce inadvertent actuation by inanimate objects.

5. Different types of switches have different benefits and drawbacks. Because different consumers might prefer the advantages of one type of switch, such as a touch sensor, over another, such as a push button, it would have been routine design procedure, as a commercial matter, to pursue multiple types of switches for implementation into a mobile phone, depending on the needs and desired operational features of the end product. Moreover, concerns about inadvertent actuation of a touch sensor by an animate object could be addressed by adjusting the sensitivity touch sensor, putting it at the bottom of a fingertip-sized indent, or moving it to a location on the phone where inadvertent actuation would have been less likely.

6. I also understand that Dr. Morley believes that Jahagirdar's display element 516 could not be activated using keys 150, because when key 150 was pressed, display element 516 had already been activated by flipping the phone closed. But Dr. Morley fails to account for the sentence in Jahagirdar describing

the fact that while display area 130 may have displayed status information with the phone flipped closed, “[a]lternatively, the status information may include little *or no* information, *where display area 130 is cleared*” when the phone was closed. Ex. 1004 (Jahagirdar) at col. 5, ll. 43-44 (emphasis added). For this alternative configuration, when key 150 was pressed to display “new visual information” relative to the cleared screen, display element 516 would then have changed from a blank screen to one displaying information, and would thus have been activated (or turned on) in the process.

7. Additionally, even if Jahagirdar’s alternative embodiment is ignored, because portions of display 130 changed in response to key 150, Jahagirdar disclosed the activation of display element 520 at the same time that display element 520 was not activated (i.e., it remained off).

8. With reference to either of the embodiments described above, when the time of controller 504’s timed out, thereby deactivating the “new display information,” display element 516 was itself deactivated, because it returned either to a blank screen or to a screen having at least some of its LED or LCD segments deactivated.

9. For the reasons described above, in combination with my first Declaration and deposition testimony, I maintain that 1, 3-5, 10-14, 19, 48, 49, 51,

and 52 of the '970 patent are rendered obvious by Ex. 1004 (Jahagirdar) and Ex. 1005 (Schultz).

Dated: June 1, 2016



Mark N. Horenstein, Ph.D., P.E.
Boston, Massachusetts