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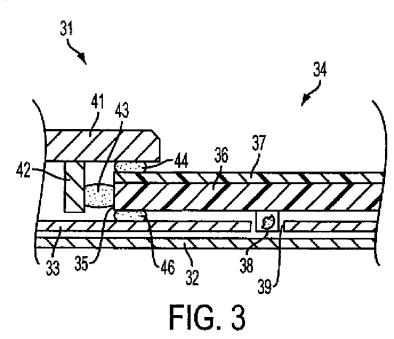
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: PLANAR SUSPENSION OF A HAPTIC TOUCH SCREEN



(57) Abstract: A planar suspension of a haptic touch screen (or other haptic touch element) is disclosed wherein a haptic touch screen display within an electronic device has a generally planar top surface, a generally planar bottom surface, and edges extending between the top and bottom surfaces. A support structure at least partially surrounds the touch screen within the device and is outboard of and spaced from the edges of the touch screen. Compliant suspension elements are fixed to and extend between the edges of the touch screen and the support structure to suspend the touch screen movably from the outboard support structure. The suspension elements preferably are no thicker than the thickness of the touch screen. Relatively thin compliant backing elements are disposed between the bottom surface of the touch screen and an underlying support structure and a sealing element preferably is disposed between the periphery of the top surface and a surrounding bezel. The planar suspension allows for a substantially thinner overall di-

mension of the touch screen display and suspension assembly while isolating haptic effects to the screen and providing the feel of a rigidly mounted screen when the screen is pressed.







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International application No PCT/US2010/024514

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F3/01 G06F3/048 G06F3/041
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched & (classification system followed by classification symbols) & G06F \end{tabular}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

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Α	WO 2004/081776 A1 (HANDSHAKE INTERACTIVE TECHNOLO [CA]; WANG DAVID [CA]; ROSSI MAURO [CA]) 23 September 2004 (2004-09-23) the whole document	4,15	
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Further documents are listed in the continuation of Box C.	X See patent family annex.				
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"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filling date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family 				
Date of the actual completion of the international search	Date of mailing of the international search report				
20 October 2010	05/11/2010				
Name and mailing address of the ISA/	Authorized officer				
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Ryan, Michael				

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INTERNATIONAL SEARCH REPORT

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