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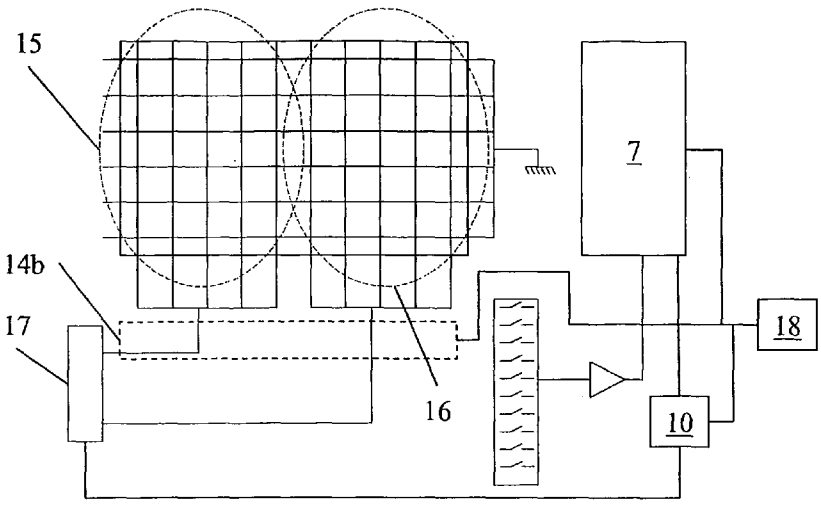
(54) Title: CAPACITANCE SENSING APPARATUS



(57) Abstract: A capacitance sensing apparatus for use in a position sensing apparatus, comprising a first set of electrodes (5) and a second set of electrodes (6) and a capacitance sensing circuit (7) arranged to determine, in use in a normal operating mode, the capacitance between each pairing of electrodes comprising one from the first set and one from the second set, in which the apparatus is further provided with at least one group switch (11a, 11b, 14a, 14b) arranged to selectively electrically connect together groups of the electrodes within the sets of electrodes, in which, in use in a low resolution mode of the apparatus the or each group switch connects together the groups of electrodes and the capacitance sensing circuit is arranged to determine the capacitance between the each pairing of groups of electrodes in one set and the electrodes or groups of electrodes of the other set. Typically, the apparatus is used in conjunction with a display (2) to form a touch-sensitive display. It may be used in a position sensing apparatus for determining the proximity and position of an object to the apparatus, and is particularly applicable to use in a console (20) of a motor vehicle of the type having the console (20) centrally between two passenger seats (21, 22).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06F B60K

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 861 875 A (GERPHEIDE GEORGE E [US]) 19 January 1999 (1999-01-19) column 5, line 3 - column 9, line 20 column 13, line 45 - column 14, line 29; figures 1-9,16,17	1-15
Y	WO 2004/053576 A (KONINKL PHILIPS ELECTRONICS NV [NL]; KNAPP ALAN G [GB]; JOHNSON MARK T) 24 June 2004 (2004-06-24) page 7, line 9 - page 8, line 18; figure 5	1-15
A	US 2004/158374 A1 (SUZUKI ISAMU [JP]) 12 August 2004 (2004-08-12) paragraphs [0035] - [0037]; figure 4	14,15

☐ Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search	Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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