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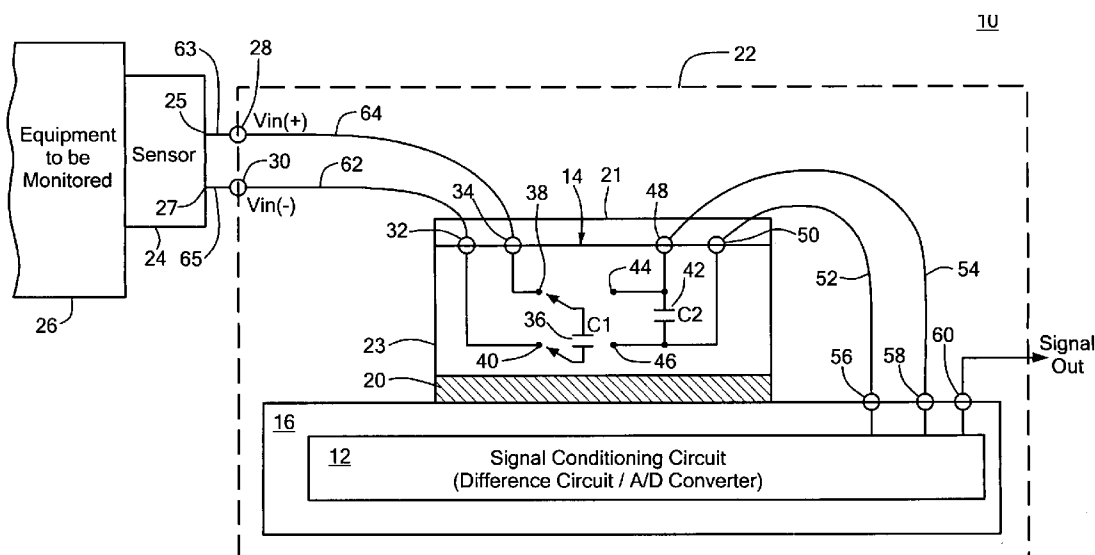
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(54) Title: GALVANICALLY ISOLATED SIGNAL CONDITIONING SYSTEM



(57) Abstract: A galvanically isolated signal conditioning system (10) includes a signal conditioning circuit (12) on an integrated circuit chip (16); a flying capacitor (36); and a galvanically isolating MEMS switching device (14) on an integrated circuit chip (16) for selectively switching the flying capacitor (36) from across a pair of input terminals (32, 34) in one state to across the input terminals (48, 50) of the signal conditioning circuit (12) in another state.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/39110

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **B81B 7/02( 2007.01),7/04( 2007.01)**

USPC: 324/415,76.66,658,678,705

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)

U.S. : 324/415,76.66,658,678,705

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 practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category *    | Citation of document, with indication, where appropriate, of the relevant passages                     | Relevant to claim No.                |
|---------------|--------------------------------------------------------------------------------------------------------|--------------------------------------|
| X<br>---<br>Y | US 20040189142 A1 (KNEISER et al.) 30 September 2004, the entire document, especially paragraph [0050] | 1-3, 13,14,21<br>-----<br>4-12,15-20 |
| Y             | US 6,429,632 B1 (FORBES et al.) 6 August 2002 (6.08.2002), the entire document                         | 4                                    |
| E             | US 6,969,913 B2 (SHIRAKAWA et al.) 29 November 2005 (29.11.2005), the entire document                  | 9-12                                 |
| Y             | US 6,376,787 B1 (MARTIN et al.) 23 April 2002 (23.04.2002), the entire document                        | 15                                   |
| Y             | US 5,481,199 A (ANDERSON et al.) 2 January 1996 (2.01.1996), the entire document                       | 4,16-20                              |
| A             | US 4,217,543 A (STRONG) 12 August 1980 (12.08.1980), the entire document                               | 1-21                                 |



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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages             | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------------------|-----------------------|
| A          | US 7,078,908 B2 (FUJITA et al.) 18 July 2006 (18.07.2006), the entire document                 | 1-21                  |
| Y          | US 6,410,371 B1 (Yu et al.) 25 June 2002 (25.06.2002), column 1, lines 24-33.                  | 7,8                   |
| Y          | US 6,052,287 A (PALMER et al.) 18 April 2000 (18.04.2000), column 5 line 5, column 6 lines 4-6 | 7,8                   |