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(54) **Title:** COMPARATOR WITH SENSITIVITY CONTROL

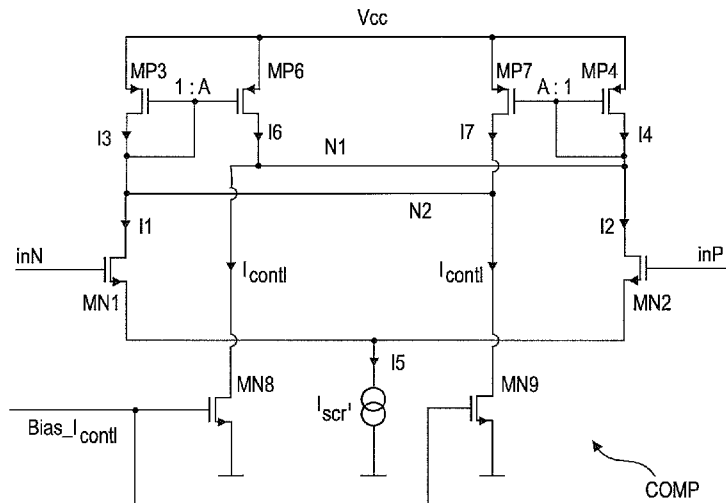


Fig.1

(57) **Abstract:** A comparator comprises a differential input stage, a current source coupled to the differential input stage for providing a tail current to one side of the differential input stage, and a differential load coupled to the differential pair and comprising at least one diode coupled load transistor per differential side. A load current through either one of the at least one diodecoupled load transistor on either differential side is mirrored out with a current mirror configuration to provide a current be fed to a respective node, each node being coupled to a respective variable biasing current source and a respective other side of the differential input stage, so as to provide a variable positive feedback to the differential input stage.

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# INTERNATIONAL SEARCH REPORT

International application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H03D1/18 H03K9/02  
ADD.

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)  
H03D H03K

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.
X	US 2006/251428 A1 (GIESELER MICHAEL [DE] ET AL) 9 November 2006 (2006-11-09)	1-3, 13
Y	paragraph [0125] - paragraph [0126]; figures 10, 11	4-12
Y	EP 1 387 492 A2 (TEXAS INSTRUMENTS DEUTSCHLAND [DE]) 4 February 2004 (2004-02-04) paragraphs [0058] - [0060]; figures 7-9, 11	4-12
A	US 2006/238301 A1 (WU JIANGFENG [US] ET AL) 26 October 2006 (2006-10-26) figure 3	1-13
A	WO 03/037662 A1 (STEMCO LLC [US]) 8 May 2003 (2003-05-08) page 5, line 27 - page 6, line 5; figure 1	4-12

Further documents are listed in the continuation of Box C.

See patent family annex.

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Information on patent family members

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