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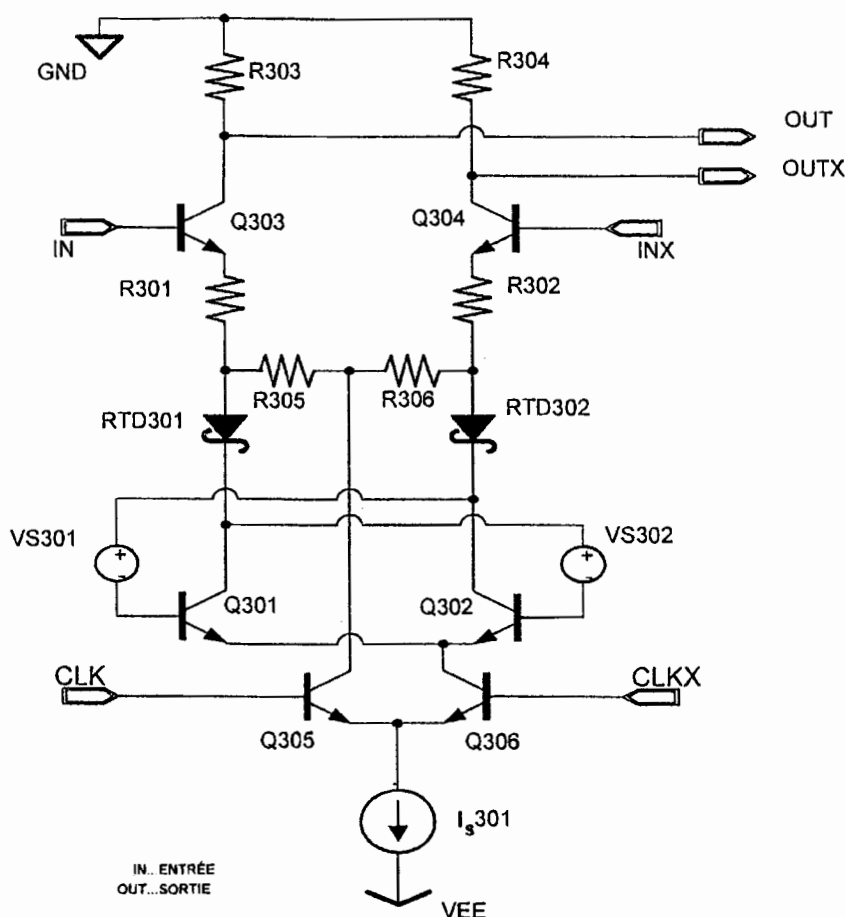
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(54) Title: COMPARATOR WITH RESONANT TUNNELING DIODES



(57) Abstract: A comparator uses two resonant tunneling diodes (RTDs) (RTD301, RTD302) in series with resistors (R301, R302) of the latch element of the comparator. By inserting two RTD diodes (RTD301, RTD302) in series with resistors (R301, R302), the negative resistance of the first and the second RTD diodes reduces the effective RD time constants of the resistors and latch, leading to a faster regeneration during a latching mode of the comparator than achieved with alternative designs.

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From : Christine Carrié**Telephone : +41 22 338 95 75****Email : Christine.Carrie@wipo.int
address****Concerns : PCT/US2006/005764****Number of pages including cover sheet : 1****Dear Sir,**

The International Bureau acknowledges receipt of your letter dated 21 March 2007 (21.03.07) requesting correction of the priority claim. However, because the time limit prescribed in Rule 26bis PCT has expired, the priority claim may no longer be corrected during the international phase. The matter will then need to be taken up by the applicant directly with each designated Office upon entry into the national phase.

It is noted that, due to the expiration of the applicable time limit for correction, it is the priority claim(s) appearing in the request which will be, or has (have) been, as the case may be, reflected in the international application as published.

With best regards,

**Christine Carrié
Processing Team1**

*C. Carrié***Fax : +41 22 338 87 40**



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

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United States Patent and Trademark Office

March 23, 2007

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**By Authority of the
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office**

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