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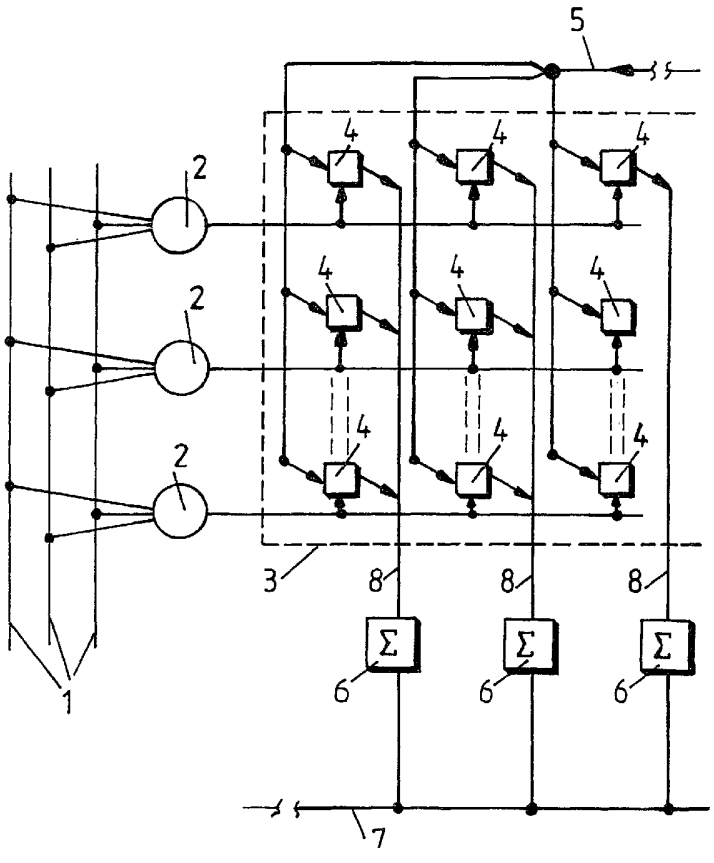
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(54) Title: INEXACT ADDRESSABLE DIGITAL MEMORY



(57) Abstract: A memory configuration for use in a computer system, the memory comprising a plurality of address decoders each of which is allocated an identifier having a predetermined number of bits, each bit having first and second selectable states, and a data memory having a plurality of word lines of predetermined length, each of the said address decoders being activatable to select one of the plurality of word lines, and the address decoders comprising means to receive an input address having a predetermined number of bits and means to compare the identifier of an address decoder with the input address wherein the memory further comprises means to activate an address decoder if at least a predetermined minimum number of bits set to the first selectable state in the input address correspond to bits set to the first selectable state in the decoder identifier.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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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, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 90 04830 A (UNIV SPACE RES ASS) 3 May 1990 (1990-05-03) cited in the application page 24, line 1 -page 27, line 25; figure 1	1,15,16, 21
A	US 5 829 009 A (FRAZIER GARY A) 27 October 1998 (1998-10-27) column 3, line 1-24; figure 2	1,15,16, 21
A	EP 0 626 650 A (TEXAS INSTRUMENTS INC) 30 November 1994 (1994-11-30) column 1, line 9-39	1,15,16, 21
A	US 5 457 408 A (LEUNG WAI-BOR) 10 October 1995 (1995-10-10) column 4, line 40 -column 5, line 12; figure 4	1,15,16, 21

[ ] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9004830 A	03-05-1990	US 5113507 A	12-05-1992
		WO 9004830 A1	03-05-1990
US 5829009 A	27-10-1998	JP 7006589 A	10-01-1995
EP 0626650 A	30-11-1994	US 5390139 A	14-02-1995
		EP 0626650 A1	30-11-1994
		JP 7282588 A	27-10-1995
US 5457408 A	10-10-1995	JP 8237110 A	13-09-1996
		KR 184919 B1	15-04-1999