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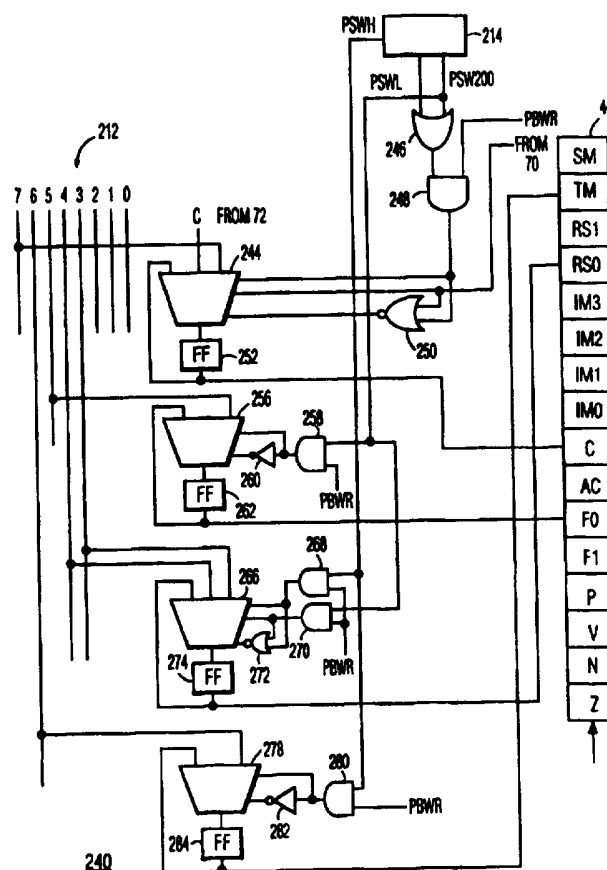
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(21) International Application Number: PCT/IB95/00688 (22) International Filing Date: 24 August 1995 (24.08.95) (30) Priority Data: 08/308,058 16 September 1994 (16.09.94) US (71) Applicant: PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). (71) Applicant (for SE only): PHILIPS NORDEN AB [SE/SE]; Kottbygatan 5, Kista, S-164 85 Stockholm (SE). (72) Inventors: WANG, Johannes; 25 King Street, Redwood City, CA 94062 (US). KHAN, Ata; 20850 Michaels Drive, Saratoga, CA 95070 (US). (74) Agent: VERDONK, Peter, Lambert, Frans, Maria; Internationaal Octrooibureau B.V., P.O. Box 220, NL-5600 AE Eindhoven (NL).		(81) Designated States: CN, JP, KR, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 30 May 1996 (30.05.96)	

(54) Title: MICROCONTROLLER WITH A RECONFIGURABLE PROGRAM STATUS WORD

(57) Abstract

A microcontroller routes bits of a program status word (PSW) to and from a bus. Whenever in a mode compatible with a prior generation microcontroller, selection and transfer circuitry places, during a read operation, bits of the PSW of the current generation on the bus but patterned to be processed by the prior generation microcontroller. In a write operation, the circuitry moves bits from the bus in an arrangement compatible with the prior generation and stores them in the arrangement of the current generation. The circuitry also allows various units such as the ALU to update the PSW register bits directly without making a bus transfer.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 95/00688

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: G06F 9/32

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)

IPC6: G06F

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)

EDOC, WPIL, CLAIMS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4456954 A (ROBERT J BULLIONS, III ET AL), 26 June 1984 (26.06.84), column 5, line 20 - line 29, claim 1 --	1-5
A	US 5327571 A (BRIAN D. MCMINN ET AL), 5 July 1994 (05.07.94), claim 1, abstract --	2,3
A	EP 0349004 A2 (NEC CORPORATION), 3 January 1990 (03.01.90), abstract -- -----	1-5

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT
Information on patent family members

05/02/96

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4456954	26/06/84	AU-B, B- 547403 AU-A- 8341582 CA-A- 1176377 EP-A, A, A 0067344 JP-C- 1355798 JP-A- 57212680 JP-B- 61022825	17/10/85 23/12/82 16/10/84 22/12/82 24/12/86 27/12/82 03/06/86
US-A- 5327571	05/07/94	NONE	
EP-A2- 0349004	03/01/90	JP-A- 2012432 US-A- 5367676	17/01/90 22/11/94