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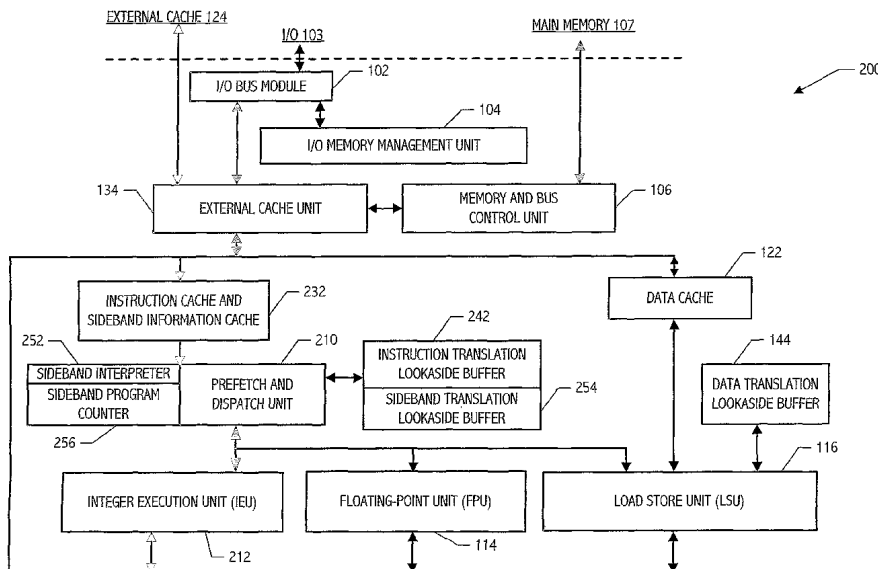
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- Published:**
- with international search report
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(54) Title: SIDEBAND VLIW PROCESSOR



(57) Abstract: A sideband VLIW processing technique is provided. The sideband VLIW processing technique utilizes processor executable code and sideband information that identifies grouping and scheduling of the processor instructions to be executed by a sideband VLIW processor. The sideband information is ignored by processors without sideband VLIW processing capability, thus providing backward compatibility for the processor executable code. The sideband VLIW processor does not have the run-time scheduling circuitry of superscalar processors and instead has circuitry to read and interpret sideband information. Multiple sets of sideband information can be provided for a single corresponding executable program, one set for each different sideband VLIW processor implementation.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/002326

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F9/38

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)
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 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	EP 0 652 510 A (INTERGRAPH CORPORATION) 10 May 1995 (1995-05-10) the whole document	1-7, 16-19, 22-25, 27-32,37
X	WO 96/29645 A (INTERNATIONAL BUSINESS MACHINES CORPORATION; IBM DEUTSCHLAND GMBH) 26 September 1996 (1996-09-26) abstract column 2, line 30 - column 3, line 20 column 4, line 35 - column 5, line 8 column 9, line 58 - column 10, line 47 ----- -/--	1-7, 16-19, 22-25, 27-32,37

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

19 May 2005

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26-01-2009

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/002326

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BIGLARI-ABHARI M ET AL: "Improving binary compatibility in VLIW machines through compiler assisted dynamic rescheduling" EUROMICRO CONFERENCE, 2000. PROCEEDINGS OF THE 26TH SEPTEMBER 5-7, 2000, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, vol. 1, 5 September 2000 (2000-09-05), pages 386-393, XP010514804 ISBN: 0-7695-0780-8</p> <p style="text-align: center;">-----</p>	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/002326

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7, 16, 17-19, 22-25, 27-32, 37

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7,16,17-19,22-25,27-32,37

Sideband interpreter for scheduling

2. claims: 8-11

Locating sideband information

3. claims: 12-15,20,21,26,33-36

Sideband interpreter for bypassing information

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/002326

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			DE 69422780 T2	17-08-2000
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