



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 85 24 97

Classification of the application (IPC):
G06F 12/14, G11C 7/10, G06F 12/02, G06F 15/78

Technical fields searched (IPC):
G06F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2012005421 A1 (MIURA SEIJI [JP] ET AL) 05 January 2012 (2012-01-05) * figures 1-2,13-19 *	1, 2, 5, 7, 9-11
X	STANKOVIC V V ET AL: "DRAM Controller with a Complete Predictor: Preliminary Results" <i>TELECOMMUNICATIONS IN MODERN SATELLITE, CABLE AND BROADCASTING SERVICE S</i> , 2005. 7TH INTERNATIONAL CONFERENCE ON NIS, SERBIA AND MONTENEGRO 28-30 SEPT. 2005, PISCATAWAY, NJ, USA, IEEE, 28 September 2005 (2005-09-28), vol. 2, DOI: 10.1109/TELSKS.2005.1572183, ISBN: 978-0-7803-9164-2, pages 593-596, XP010874696 * the whole document *	1-4, 7, 9-11

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 05 July 2023	Examiner Havard, Corinne
---------------------------	--	-----------------------------

CATEGORY OF CITED DOCUMENTS

- | | |
|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| & : member of the same patent family, corresponding document | L: document cited for other reasons |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 85 24 97

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-5, 7, 9-11

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, wherein the current row and the next row are in the same memory bank

2. claim: 6

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, with a plurality of processor subunits spatially distributed among the plurality of discrete memory banks

3. claim: 8

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, each bank including subbanks and the bank controller including associated subbank controllers

4. claims: 12, 15

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, prohibiting row activation when the prediction is weak

5. claim: 13

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, the current address being generated by a chain of flip flops sampling the address generated in a delay and the predicted address being at the input of the chain of flip flops

6. claim: 14

Providing a current address of a current row and providing a predicted address of a next row before completion of the operation relative to the current row, the bank controller being configured to ignore predicted addresses during a predetermined period following a reset of the memory unit

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims: 1-5, 7, 9-11

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 05 July 2023	Examiner Havard, Corinne
---------------------------	--	-----------------------------

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN
SEARCH REPORT

Application number:
EP 20 85 24 97

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 05-07-2023
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2012005421	A1	05-01-2012	JP	2002063069 A	28-02-2002
			KR	20020015266 A	27-02-2002
			TW	544574 B	01-08-2003
			TW	I251739 B	21-03-2006
			TW	I284801 B	01-08-2007
			US	2002023197 A1	21-02-2002
			US	2002035662 A1	21-03-2002
			US	2002053001 A1	02-05-2002
			US	2003126392 A1	03-07-2003
			US	2004095818 A1	20-05-2004
			US	2006245281 A1	02-11-2006
			US	2010064101 A1	11-03-2010
			US	2012005421 A1	05-01-2012