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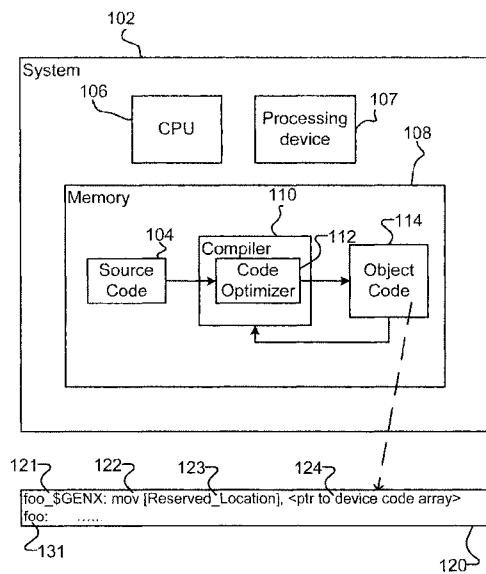
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[Continued on next page]

(54) **Title:** METHODS AND SYSTEMS FOR MAPPING A FUNCTION POINTER TO THE DEVICE CODE

Figure 1



(57) **Abstract:** Methods for mapping a function pointer to the device code are presented. In one embodiment, a method includes identifying a function which is executable by processing devices. The method includes generating codes including a first code corresponds to a first processing device and a second code corresponds to a second processing device. The second processing device is architecturally different from the first processing device. The method further includes storing the second code in a byte string such that the second code is retrievable if the function will be executed by the second processing device.



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A. CLASSIFICATION OF SUBJECT MATTER*G06F 9/06(2006.01)i, G06F 9/30(2006.01)i, G06F 9/44(2006.01)i*

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 9/06; G06F 9/54; G06F 12/02; G06F 15/00; G06F 12/00; G06F 9/46; G06F 9/45

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: heterogeneous processors, CPU-GPU(non CPU), source code, compile, annotated function, prologue, byte string, unique code pattern, function pointer;

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2010-0122264 A1 (XIAOCHENG ZHOU et al.) 13 May 2010 See paragraphs [0015],[0069], claims 2,3,10,12, and figure 7.	1-16
A	US 2004-0083462 A1 (MICHAEL KARL GSCHWIND et al.) 29 April 2004 See paragraphs [0008],[0025],[0026],[0029], claims 11-16, and figures 2, 3A.	1-16
A	US 2011-0022817 A1 (GASTER BENEDICT et al.) 27 January 2011 See paragraphs [0036],[0046]-[0056], and figure 3.	1-16
A	US 2008-0256330 A1 (WANG PERRY et al.) 16 October 2008 See abstract, and claims 1,3.	1-16

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

* Special categories of cited documents:

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"&" document member of the same patent family

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