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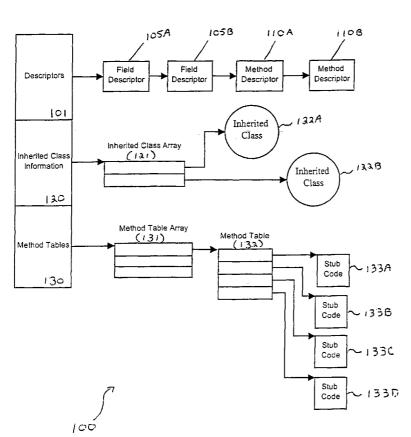   12 September 2001 (12.09.2001)

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(54) Title: LAZY COMPILATION OF TEMPLATE-GENERATED CLASSES IN DYNAMIC COMPILATION EXECUTION ENVIRONMENTS

(57) Abstract: Template-generated classes in program code are compiled efficiently through a process of lazy compilation resulting in improved compilation times. Lazy compilation includes the generation of objects representing a class template and a template-generated class as well as the selective compilation of class methods that are invoked in the program code. Code sharing is a further enhancement for increasing compilation speed by providing a system and method for sharing executable object code for compatible methods among different classes generated from the same class template.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7   G06F9/45   G06F9/44   G06F9/445

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)
IPC 7   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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	INTERSIMONE, DAVIDI: "Borland Appaccelerator/Latte - Interview with Regis Crelier " SUMMARY OF JAVA JUST-IN-TIME COMPILERS, 'Online! 23 July 1996 (1996-07-23), pages 1-5, XP002247454 Retrieved from the Internet: <URL:http://al.cs.ua.edu/{jones/jit.html> 'retrieved on 2003-07-14! page 1 --- -/--	1-82

[X] Further documents are listed in the continuation of box C.   [ ] Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
X	MORRISON, MICHAEL: "Java 1.1 Unleashed, Professional Reference Edition Chapter 53" 'Online! 12 April 1997 (1997-04-12) , SAMS , US XP002247456 ISBN: ISBN 1575210495 Retrieved from the Internet: <URL: http://sunsite.iisc.ernet.in/virlib/java/u nleash/jul53.htm#E67E67> 'retrieved on 2003-07-14! page 2 -page 3	1-82
A	KRALL A ET AL: "CACAO EIN 64BIT - JAVAVM - JUST-IN-TIME - COMPILER" DIPLOMARBEIT CACAO EIN 64BIT- JAVAVM - JUST-IN-TIME - COMPILER, XX, XX, January 1997 (1997-01), pages 1-88, XP001013736 page 55 -page 56	1-82
A	GRANT B ET AL: "The benefits and costs of DyC's run-time optimizations" ACM TRANSACTIONS ON PROGRAMMING LANGUAGES AND SYSTEMS, SEPT. 2000, ACM, USA, vol. 22, no. 5, pages 932-972, XP001159776 ISSN: 0164-0925 page 954 -page 955	1-82

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