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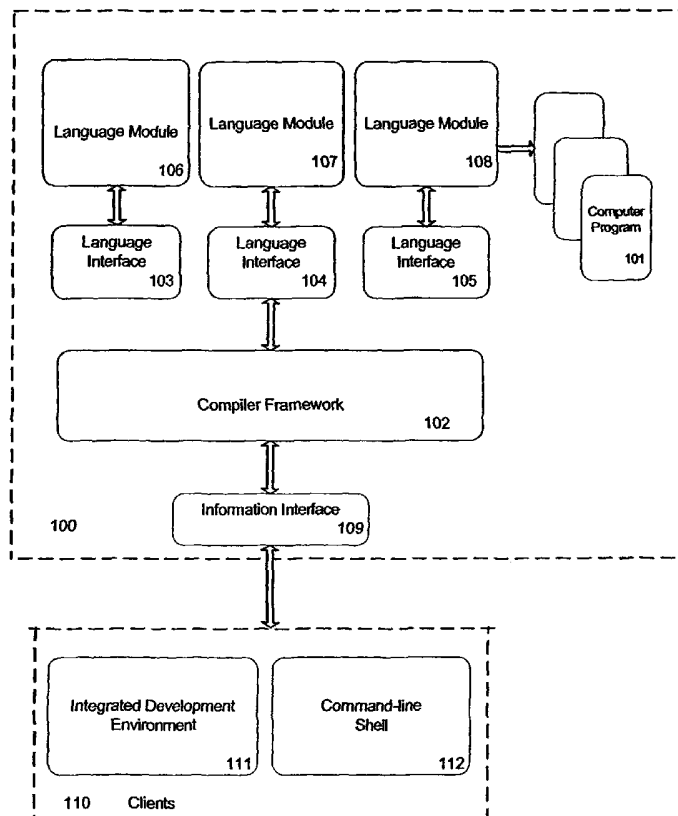
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(54) Title: SYSTEM AND METHOD FOR MULTI-LANGUAGE EXTENSIBLE COMPILER FRAMEWORK



(57) Abstract: To meet the current trend in computer programming, a multi-programming-language compiler system is designed to include a compiler framework (102) which creates a general environment in which to carry out compilation and language modules (106-108) to encapsulate the details of various programming languages. Such a system makes it easy for tool vendors and end users to adapt to a world where computer programs are written in multiple languages. New language modules may be written that add support for new languages to the compiler framework. It may also be possible to extend existing language modules so that a variant on an existing language may be added to the compiler framework. Such a system may also be adapted to permit several different clients to access detailed language information from the compiler framework. These clients may include a standard command-line shell or a sophisticated multi-language integrated development environment.

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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 717/140, 717/156, 707/104, 711/119 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched INVENTOR NAME SEARCH, EAST, USPAT, US-PGPUB, EPO, JPO, NPL, INTERNET SEARCH Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) USPAT, US-PGPUB ('type cache', 'multi programming', 'compiler', 'Java', 'source code editor', 'nested', 'lexical' etc.)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	U.S. 5,836,014 A (Faiman) 10 November 1998 (10.11.1998), Fig. 1, Abstract, column 2, lines 36-40, column 3, lines 45-49, 59-61, 63-65; column 6, lines 24-26, 65-67; column 7, lines 59-60.	1, 7-8, 19, 25-26, 37, 43-44, 55-56 ----- 2-6, 9-18, 20-24, 27-36, 38-42, 45-54,
Y, E	US 6,804,686 B1 (Stone et al.) 12 October 2004 (12.10.2004), column 8, lines 12-24, 42-44; column 9, lines 1-10, 40-42, 49-53, 58-59, 65-67; column 10, lines 3-6, 8-10; column 11, lines 36-38; column 13, lines 29-31, 56-57; column 14, lines 59-67; column 18, lines 38-40.	2-4, 6, 9, 14-18, 20-22, 24, 27, 32-36, 38-40, 42, 45, 50-54
Y, E	US 6,732,237 B1 (Jacobs et al.) 04 May 2004 (04.05.2004), column 2, lines 48-51; column 14, lines 30-33.	5, 23, 41
Y	Lauer, Christophe "Introducing Microsoft DotNet", 02 July 2002 (02.07.2002), pages 4-5.	10-13, 28-31, 46-49
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