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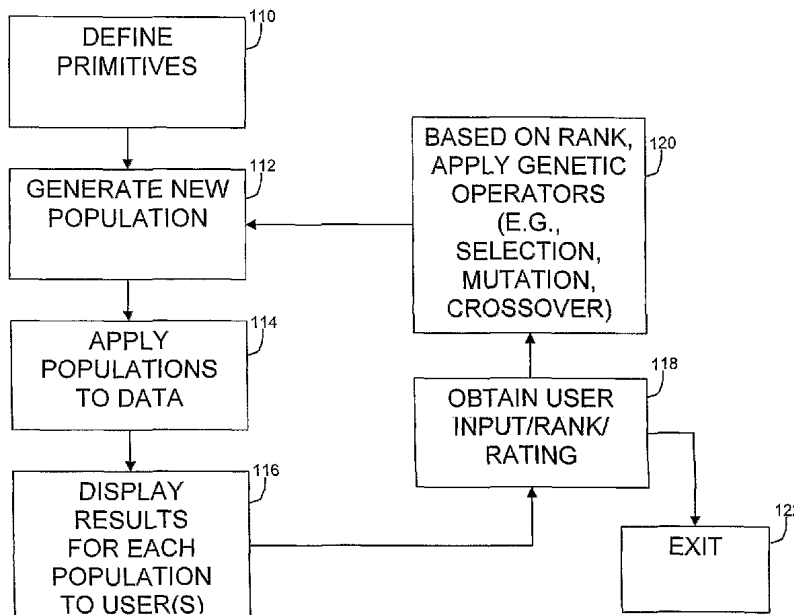
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[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR APPLYING GENETIC OPERATORS TO DETERMINE SYSTEM CONDITIONS



(57) Abstract: Disclosed are methods, systems, and/or processor program products that include generating a population of genotypes (Figure 1, 110, 112, 114, 116, 118, 120 & 122), the genotypes based on at least one stimulus to a system, measuring at least one response of the system upon providing the population of genotypes to at least one model of the system, and, based on the measured at least one response of the system, performing at least one of (a) applying at least one genetic operator to at least some of the populations of genotypes, and iteratively returning to generating a population of genotypes, and (b) associating a condition of the system with at least one of the population of genotypes.

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US CL : 706/13

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)

U.S. : 706/13

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A,P | US 6,662,167 A(XIAO) 9 December 2003 (9.12.2003) see entire document ... | 1-15 |
| A | 6,088,690 A(Gounares et al.) 11 June 2000 (11.06.2000) see entire document ... | 1-15 |
| A | US 6,282,527 A(Gounares et al.) 28 August 2001 (28.08.2001) see entire document ... | 1-15 |
| A | US 5,978,507 A(Shackleton et al.) 2 November 1999 (2.11.1999) see entire document ... | 1-15 |

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