1 **FUZZY LOGIC HARDWARE**
2 .Fuzzy neural network
3 .Analog fuzzy computer (e.g., controller)
4 .Digital fuzzy computer (e.g., controller)
5 .Having function generator
6 ..By neural network
7 .Having function calculator
8 .Fuzzy inference processing
9 .Defuzzification processing
10 **PLURAL PROCESSING SYSTEMS HAVING PARTICULAR USER INTERFACE**
12 **MACHINE LEARNING**
13 .Genetic algorithm and genetic programming system
14 **ADAPTIVE SYSTEM**
15 **NEURAL NETWORK**
16 .Learning task
17 ..Approximation
18 ..Association
19 ..Constraint optimization problem solving
20 ..Classification or recognition
21 ..Prediction
22 ..Signal processing (e.g., filter)
23 ..Control
24 ..Beamforming (e.g., target location, radar)
25 .Learning method
26 .Structure
27 ..Architecture
28 ...Modular
29 ...Lattice
30 ...Recurrent
31 ...Multilayer feedforward
32 ...Single-layer
33 ..Semiconductor neural network
34 ..Hybrid network (i.e., analog and digital)
35 ...Using pulse modulation
36 ...Having multiplying digital-to-analog converter
37 ...Having digital weight
38 ..Analog neural network
39 ...Modifiable weight
40 ..Radiant energy neural network
41 ..Digital neural network
42 ...Parallel connection
43 ...Digital neuron processor
44 .Neural simulation environment
45 **KNOWLEDGE PROCESSING SYSTEM**
46 .Knowledge representation and reasoning technique
47 ..Ruled-based reasoning system
48 ...Having specific pattern matching or control technique
49 ..Blackboard system
50 ..Having specific management of a knowledge base
51 ..Non-monotonic reasoning system
52 ..Reasoning under uncertainty (e.g., fuzzy logic)
53 ..Frame-based reasoning system
54 ..Analogical reasoning system
55 ..Semantic network (e.g., conceptual dependency, fact based structure)
56 ..Predicate logic or predicate calculus
57 ..Propositional logic
58 ..Temporal logic
59 .Creation or modification
60 ..Expert system shell or tool
61 ..Knowledge acquisition by a knowledge processing system
62 **MISCELLANEOUS**

CROSS-REFERENCE ART COLLECTIONS

900 **FUZZY LOGIC**
902 **APPLICATION USING AI WITH DETAIL OF THE AI SYSTEM**
903 .Control
904 ..Manufacturing or machine (e.g., agricultural machinery, machine tool)
905 ..Vehicle or aerospace
906 ..Process plant
907 ...Power plant
908 ..Electronic or computer (internal or network) circuit
909 ..Communication
910 ..Elevator
911 .Nonmedical diagnostics
912 ..Manufacturing or machine (e.g., agricultural machinery, machine tool)
913 ..Vehicle or aerospace
914 ..Process plant
915 ...Power plant
916 ..Electronic or computer (internal or network) circuit

917 ..Communication
918 ..Elevator
919 .Designing, planning, programming, CAD, CASE
920 ..Simulation
921 ..Layout (e.g., circuit, construction)
922 ..Computer program preparation
923 ..Construction
924 .Medical
925 .Business
926 ..Time management
927 .Education or instruction
928 .Earth science
929 ..Geological (e.g., seismology)
930 ..Environment
931 ...Weather
932 .Mathematics, science, or engineering
933 .Law, law enforcement, or government
934 .Information retrieval or information management

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 **ARTIFICIAL INTELLIGENCE (395/1)**
FOR 101 .Fuzzy logic hardware (395/3)
FOR 102 .Knowledge processing (395/10)
FOR 103 ..Plural processing systems (395/11)
FOR 104 ..Graphical or natural language user interface (395/12)
FOR 105 ..Genetic algorithm (395/13)
FOR 106 ..Trainable (i.e., adaptive) system (395/20)
FOR 107 ...Neural network (395/21)
FOR 108 ....Connectionist expert system (395/22)
FOR 109 ....Training (i.e., programming or learning) (395/23)
FOR 110 ....Structure (395/24)
FOR 111 .....Radiant energy type (e.g., optical) (395/25)
FOR 112 .....Sequential processor (395/26)
FOR 113 .....Including a digital or binary element (395/27)
FOR 114 ..Expert system (395/50)
FOR 115 ...Deduction, control, or search techniques (395/51)
FOR 116 ....Forward or backward chaining (395/52)
FOR 117 ....Blackboarding (395/53)
FOR 118 ....Knowledge base accessing (e.g., DBMS, table) (395/54)
FOR 119 ....Truth maintenance system (TMS) (395/55)
FOR 120 ...Knowledge representation (395/60)
FOR 121 ....For inexact knowledge (e.g., fuzzy logic) (395/61)
FOR 122 ....Object (i.e., object-attribute-value), frame and slot, or script (395/62)
FOR 123 ....Semantic network (i.e., conceptual dependency, fact based structure) (395/63)
FOR 124 ....Rete network or meta-knowledge (395/64)
FOR 125 ....Inheritance (395/65)
FOR 126 ....Predicate logic or predicate calculus (395/66)
FOR 127 ....Propositional logic (395/67)
FOR 128 ....History base (395/68)
FOR 129 ...Creation or modification of an expert system (395/75)
FOR 130 ....Expert system shell or tool (395/76)
FOR 131 ....Learning or knowledge acquisition by the expert system (395/77)