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G-FORM MEMORY GENBIOM KBO DESCRIPTIONS

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ABSTRACT

KBO (Knowledge Based Object) clustering and their properties are studied in [1]. In this paper, a remote programmable, ubiquitous, and wireless-grid communicate able BME-inspired G-form memory GENBIOM KBO description will be developed and introduced. Where, "G = (A, D, C) form memory GENBIOM KBO description" stands for "G = (A: Array, D: Digraph, C: Cluster) form memory GENBIOM KBO description" while "GENBIOM description" stands for "**Gen**etic-and-**Bio**tic **M**achine" inspired mathematical model type description".

Key Words: ubiquitous, wireless, grid, clustering, arraying, communicating, BME-inspired, KBO, A-form, D-form, C-form, G-form, GENBIOM KBO, formal language.

JEL Classification: L60, L70, L90**.**

AMS Classification: 06B05, 06B15, 65M55, 68M10, 68M14, 68Q65, 68Q85, 68T30, 94A05, 94A15.

1. INTRODUCTION

KBO (Knowledge Based Object) clustering and their properties are studied in [1]. A remote programmable ubiquitous and wireless-grid communicate able BME (Business Management Economy) inspired G = (A, D, C) = (A: Array, D: Digraph, C: Cluster) form memory GENBIOM KBO description; realization; programming and computing environments will be studied in this paper. Any remote programmable BME-inspired G = (A, D, C) form memory GENBIOM KBO design has inherently sequential, parallel, distributed, heterogeneous, dynamic, and mobilized structure due to the resources used and performance

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obtained by them. We are trying to describe some new G-form memory GENBIOM KBO dependent model descriptions generated by the user defined recursive data structures. They are remote programmable, ubiquitous, and wireless-grid communicate able BME-inspired G-form memory descriptions. One can remote-program them intelligently, sufficiently and efficiently under a set of very well recognizable and secure principles or formal grammar rules coded and loaded into a G-form memory vocabulary GENBIOM KBO in the light of [1]. The background information can be found in [1-4].

2. DEVELOPMENTS

2.1 SEMANTICS

Definition 1 Let us assume that the following are correct interpretations available on the FTD KBO system descriptions in a given distributed environment:

1) FTD is a brief vocabulary for "Formally-finite Technology Dependent,"

2) KBO is a brief vocabulary for "Knowledge Based Object,"

3) A description is a formal or mathematical code that one syntactically, semantically and pragmatically can interpret it correctly in a communicational and distributed environment. Further let us assume that:

1) A set of elements, organized under a FTD grammar (or a set of formal rules) in order to satisfy a set of goals (or purposes or aims) is called *a FTD system*. Each element of a FTD system can be a FTD system.

2) A FTD system that it has at least *one* FTD subsystem that it flashes some of the following distinguishable properties:

(a) Goal,

(b) Syntactic structure,

(c) Semantic meaning,

(d) Pragmatic utilization,

(e) Bounded and secure environment,

(f) Access function to some internal or external substructures generated by a given internally and externally secure FTD environment,

(g) Threshold logic, for determining secure environment and non secure environment.

(h) Organizationally secure and recognizable G-form memory vocabulary in a formal language L that one can design and realize it under a subset of secure principles, obtained from a given universal set of description-constructional principles coded into a formal grammar, is called a *seed G-form memory* GENBIOM *KBO vocabulary description.*

A universal set of constructional secure principles for a seed G-form GENBIOM KBO vocabulary description may have the following observable properties:

1) Correctness,
1) Robustness,
2) Extendibility,
3) Contractibility,
4) Recursive reusability,
5) Acceptability,
6) Efficiency,
7) Portability,
8) Verifiability,
9) Integrity,
10) Easy usability,
11) Interoperate ability,
12) Simplicity,
13) Decomposability,
14) Compos ability,
15) Understandability,
16) Protect ability,
17) Continuity,
18) Remote changeability,
19) Remote programmability,

.
.
.
,

Etc.

The above list of constructional secrete and secure principles are used for generating secrete and secure seed G-form memory GENBIOM KBO description. Hence, a seed G-form GENBIOM KBO description is a properly constructed **token KBO entity** form, like an atom or a molecule in the nature.

Definition 2: Assume the interpretation of FTD, BME and G-forum memory GENBIOM KBO are known in a given distributed business environment E.

1) A FTD digraph is a D-vocabulary form. Each its vertex acts as communicate able BME-inspired G-form memory GENBIOM KBO. Where, a G-form memory *digraph GENBIOM KBO description* is practically a token seed-vocabulary entity for representing a D-form memory seed in an abstract formal language L_D. Where, D stands for digraph vocabulary seed.

2) The incidence matrix of a *D-form seed GENBIOM KBO description* is called an array memory seed *GENBIOM KBO description*. Hence, an array memory seed *GENBIOM KBO description* is also a token seed-vocabulary entity that one can represent it as an A-form memory GENBIOM KBO in an abstract formal language, L_A. Where, A stands for an array seed.

3) A FTD *digraph GENBIOM KBO description* in which each its going out arc is substituted by a transmitter type GENBIOTA antenna, and each it's coming-in arc is substituted by a receiver type GENBIORA antenna, is called a *cluster memory GENBIOM KBO description*. Hence, a *cluster memory GENBIOM KBO description* is also a token seed-vocabulary entity for representing a C-form in an abstract formal language, L_C. Where, C stands for cluster seed.

4) The set of three different descriptions of GENBIOM KBO seed-vocabularies is called a G-Form memory GENBIOM KBO description. Hence, G-form $\in$ { A-form, D-form, C-form}. From this notion, one can write G-form $\leftarrow$ A-form $\mid$D-form $\mid$C-Form or G $\leftarrow$ A $\mid$D $\mid$C. Where A is an array memory seed GENBIOM KBO description variable in L_A, D is digraph memory seed GENBIOM KBO description variable in L_D, and C is cluster memory seed GENBIOM KBO description variable in L_C.

Corollary 1: Let

1) L_D is a digraph memory seed GENBIOM KBO description vocabulary generating formal language,

2) L_A is an array memory seed GENBIOM KBO description vocabulary generating formal language, and

3) L_C is a cluster memory seed ENBIOM KBO description vocabulary generating formal language.

There exists, at least one:

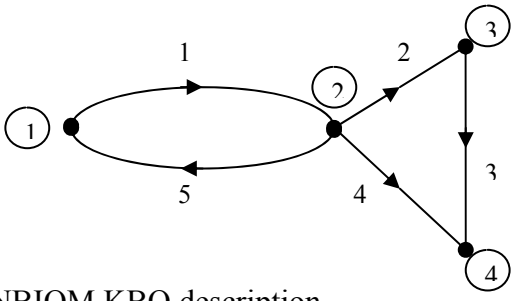
a) Digraph, or D-form, memory seed GENBIOM KBO description vocabulary in G-form memory based GENBIOM KBO description v_D in L_D.

b) Array, or A-form, memory seed GENBIOM KBO description seed-vocabulary G-form memory based GENBIOM KBO description $v_{A,}$ in $L_{A.}$

c) Cluster, C-form, memory GENBIOM KBO description seed-vocabulary G-form memory description $v_{C,}$ in L_C.

Proof:

a) There is a digraph D-form memory GENBIOM KBO description is a seed-vocabulary $v_{D,}$ in L_D. It is a G-form memory seed GENBIOM KBO description. See the following digraph D-form.



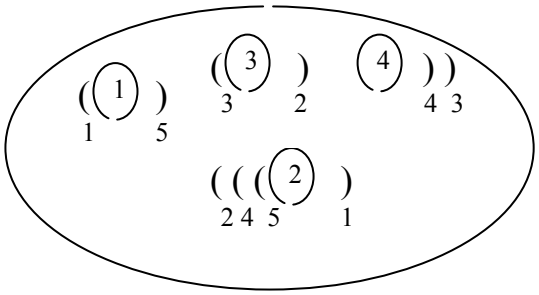
Where, each vertex is a generalized GENBIOM KBO description.

b) There is an array A-form memory GENBIOM KBO description seed-vocabulary v_A in L_A. It is a G-form memory based GENBIOM KBO description. See the following array A-form.

	1	2	3	4	5
1	1	0	0	0	-1
2	-1	1	0	1	1
3	0	-1	1	0	0
4	0	0	-1	1	0

Where, each cell in the array is a sub-array for generalized KBO description.

c) There is a cluster C-form GENBIOM KBO description seed-vocabulary v_C in L_C. It is a G-form memory GENBIOM KBO description. See the following cluster C-form.



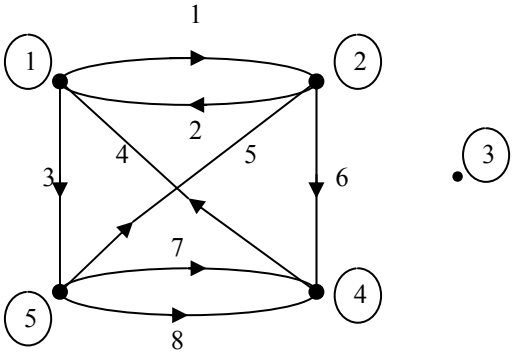
Where, each object in the cluster is a generalized FSM or a communicating GENBIOM KBO description. It can be intelligent or non intelligent remote programmable ubiquitous and wireless-grid communicate able BME (Business Management Economy)-inspired GENBIOM KBO cluster type description for processing information that it is generally described by a set of FSMs. Where, FSM stands for "Finite State Machine."

Observe that three different type seed-vocabularies v_D, v_A and v_C in three different formal languages L_D, L_A and L_C for generating different types of G-form memory GENBIOM KBO description with the same semantic meaning.

Definition 3: Any description of a GENBIOM KBO seed-vocabulary in the form of a G-form memory GENBIOM KBO is simply called a G-form memory.

Example 1:

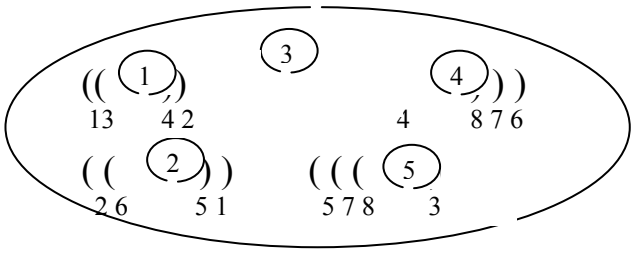
a) The following digraph D-form memory GENBIOM KBO description seed-vocabulary code is a G-form memory GENBIOM KBO description.



b) The following array A-form memory GENBIOM KBO description seed-vocabulary code is a G-form memory based GENBIOM KBO description.

	1	2	3	4	5	6	7	8
1	1	-1	1	-1	0	0	0	0
2	-1	1	0	0	-1	1	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	1	0	-1	-1	-1
5	0	0	-1	0	1	0	1	1

c) The following cluster C-form memory GENBIOM KBO description seed vocabulary code is a G-form memory GENBIOM KBO description.



Observe that we are dealing with three different types of G-form memory GENBIOM KBO seed vocabularies in three different formal languages with the same semantic meaning.

Corollary 2 There is an arraying device for generating a communicating cluster GENBIOM seed- vocabulary G-form memory based GENBIOM KBO description.

Proof Observing the proof of Corollary 1 and the content of Example 1, one can easily see that there is a grid arraying device for generating a cluster GENBIOM KBO seed-vocabulary G-form GENBIOM KBO description.

Corollary 4 Each digraph D-form memory GENBIOM KBO seed vocabulary can be arrayed and programmed by a remote A-form memory GENBIOM KBO seed-vocabulary G-form memory description.

Proof Observing the proof of Corollary 1 and the content of Example 1, one can easily see that each digraph D-form memory GENBIOM KBO seed vocabulary can be arrayed and programmed by a remote programmer as a GENBIOM seed vocabulary G-form memory based GENBIOM KBO description.

Corollary 5 There is a mod n x mod m design technology for design each GENBIOM KBO seed-vocabulary G-form memory GENBIOM KBO description.

Proof Observing the proof of Corollary 1 and the content of Example 1, one can easily see that there is a mod n x mod m design technology for each description GENBIOM KBO seed vocabulary G-form memory.

Final Results and Suggestions:

1) BME is a brief vocabulary for "Business, Management and Economy,"

2) GENBIOM is a brief vocabulary for "**Gen**etic-and-**Bio**tic **M**achine." It is a mathematical model, like a FLA in [2]".

3) A digraph is a brief vocabulary for representing "directed graph." of a FSM. These imply that:

(a) A digraph formally represents an abstract communicating relational form in mathematics.

(b) A digraph formally represents an abstract finite state machine-FSM model form in the computer science. It is a computing device that it process information in a given environment.

4) **A new description of a G-form memory GENBIOM KBO seed vocabulary has been found and introduced in this paper.**

5) For generating any remote programmable ubiquitous, wireless-grid communicate able BME-inspired GENBIOM KBO clustering seed-vocabulary G-form memory can be used as a mathematical tool.

6) There is a science for producing mathematical descriptions on the G-form memory GENBIOM KBO seed vocabulary. It has to be studied.

7) It is found that G-form memory GENBIOM KBO description type is a very deep and dense recursive description.

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