

Steven J. McGee Distributed Systems Architect / Patent Applicant / Consultant



Figure 1: USPTO 13/573,002 Annex K Signals & Telemetry for RBF's The World Game
 USPTO 13/573,002 Adaptive Procedural Template Coding programmable \$\$, Economy
 Current: Distributed Systems Architect, Patent Applicant – self-employed.

June 2004 – March 2018 Simple Always Wins Concepts LLC SAW Concepts LLC (dissolved)

Defense Contractor for Validity Systems, SAIC x 2, MITRE, BAE Systems 1996 – 2002

Master of Science Information Systems Western International University 3.85 GPA 93 - 96

B.A. Psychology, Business Concentration Indiana University of Pennsylvania 1978 - 1992

United States Army Signal Corps Officer 11 years 82 – 93 / ROTC Full Scholarship Recipient

Presenter: International Conference Complex Systems ICCS New England chapter 2006

June 2003 – Present: Patent applicant USPTO 13/573,002: The Heart Beacon Cycle Time – Space
 Meter Adaptive Procedural Template (checklist of tools, processes, algorithms, protocols... useful

to form Distributed Autonomous Groups DAGS synchronized in time – space Checklist: ideas, algorithms, processes, procedures, metrics, meters, signal & telemetry structured data for consistent Eco sustainable economic time cycle epochs for programmable \$ / economy / Net, Net of money foundation technology for DeFi, programmable internet, internet of money.



USPTO 13/573,002: Adaptive Procedural Template foundation tech list for net, net of \$, economy. System of systems structured data exchange brevity codes - message sets telemetry syntax lexicon mapped to A.I., IoT symbols for human man-machine interface. Foundation technology for programmable \$\$\$ money is being asserted by Banks / tech firms which are forming teams to assert establishment of foundation technology pursuant to securing IP intellectual property patent claims in DeFi / programmable money.

SCOTUS “Alice in Wonderland” ruling "claims may not direct towards abstract ideas".

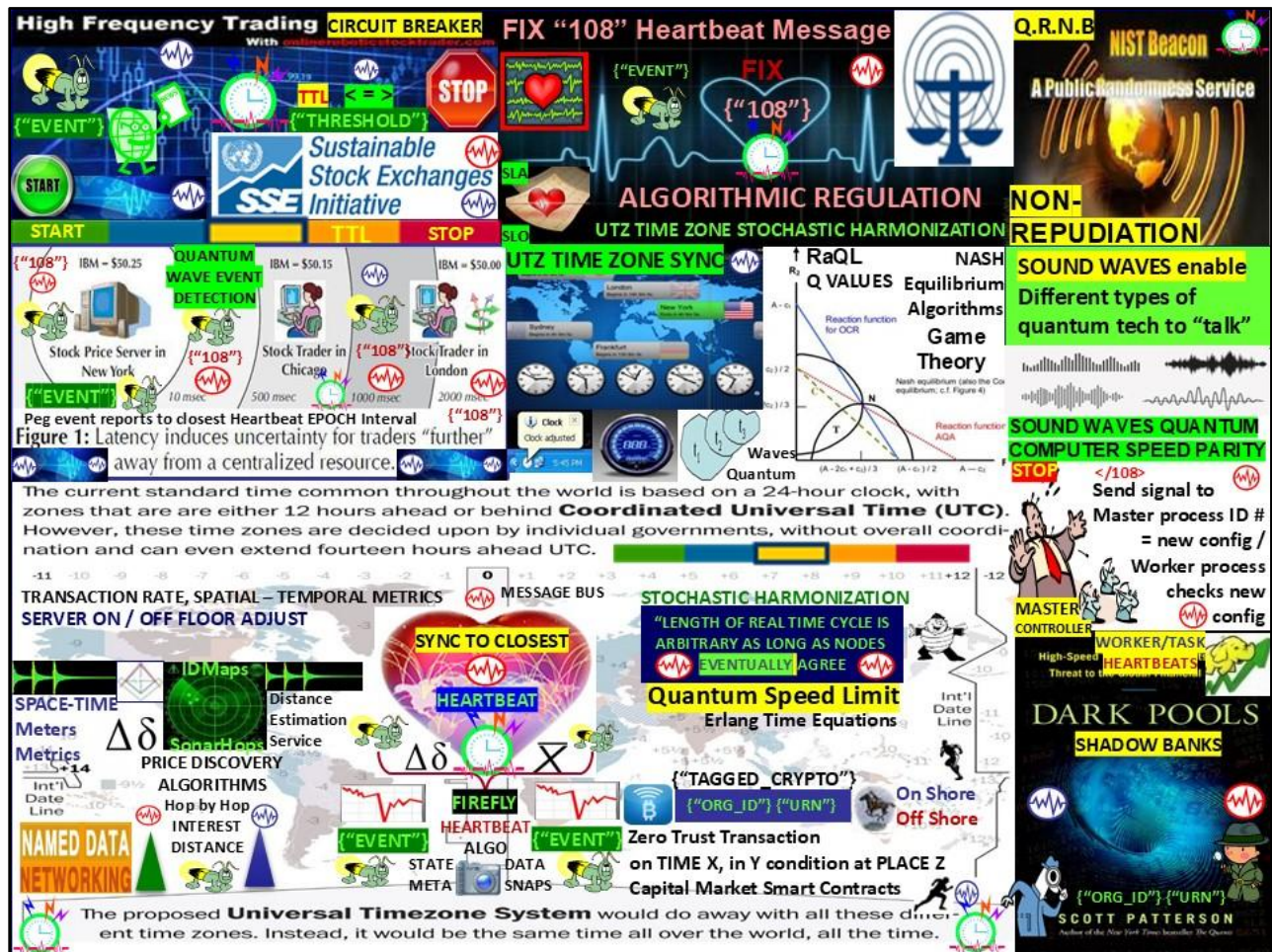


Figure 2: USPTO 13/573,002 / SSEI Sustainable Stock Exchange Initiative

The United Nations Sustainable Stock Exchanges (UN SSE) initiative has officially joined the Global Capacity Building Coalition (GCBC) template framework for Stock Exchanges

USE CASE: Micro to macro-cycle system of systems data updates at agreed upon times observing agreed durations i.e., stock, commodity, currency trade epochs. Discrete time interval start, stop, TTL Time To Live trade windows commands embedded in $\langle /108 \rangle$ heartbeats, heartbeat messages.

Algorithmic regulation / Algorithmic stable coin support: firefly inspired heartbeat synchronization algorithm in stocks, currency exchanges is a segue to algorithmic regulation. Improving temporal trade parity between Bitcoin, crypto & conventional stock exchanges by using the firefly-heartbeat algorithm to take trade speed samples among trade populations across time zones to establish consensus among disparate trade protocols, optimal trade speed / frequency price discovery as a statistical mean.



THESES: All things internet, net of money blockchains are formed by unicast, multicast, anycast protocols. Programmable money's improvements are in cryptography. Blockchains are formed by unicast, multicast, anycast and workflow filters.

Programmable money's improvements are in cryptography. Internet 3.0 and the new web will be based on the original structure described by Stanford University. There are no packets, frames, layers, blocks, shards, graphs, hash graphs "bots", "motes", "qubits" ... or Satoshi's traversing the net, stored in a blockchain cube. Transactions are unicast, multicast, or anycast (workflow). The afore mention terms are non-existent fabrication. We need an Eco sustainable Economic Heartbeat with incentives systemically coded into the programmable economy applying consistent time - space metrics, meters and a syntax lexicon library. The German military made a suggestion circa 2003 namely OOTW Operations Other Than War of use of Battlefield Digitization for humanitarian relief, digital dashboards displaying updates to an EIN Earth Intelligence Network drawn from a system of Distributed Autonomous Systems DAO. (RAND term circa 2001)



FIGURE 4: Foundation technology framework formed by Battlefield Digitization OOTW

Battlefield Digitization for OOTW Operations Other Than War: i.e., Eco Economic Epoch Heartbeat / USPTO 13/573,002 The Heart Beacon Cycle Time - Space Meter Adaptive Procedural Template paper, use cases, claims, graphics, metrics, meters, syntax lexicon #A.I. Battlefield Digitization consists of structured data where OPSCODE brevity codes are mapped to symbology, symbol sets organized into 300 + Use Case messages . Brevity code mapping to symbols is essential to A.I. Artificial Intelligence Man – machine interface

Improvements as the basis of invention to U.S. Army CECOM Communication Electronics Command's "greatest invention" distributed systems dashboard structured data exchange framework as swords to plowshare use cases for economic reset, climate change sustainable development incentives, stable coin Fed-World Coin.

Teams are forming to win the DeFi Distributed Finance / programmable \$\$\$ money IP Intellectual Property wars. The winning team will prove that their IP intellectual property filings established. Foundation tech described through the lens of SCOTUS 2014 "Alice in Wonderland" ruling? "Claims may not direct towards abstract ideas"

USE CASES

1. Supreme Court **US SC 573 US 134 2347** Alice Corp Vs CLS Bank compliant physical meme i.e., cryptocurrency blockchain DLT programmable money meme

2. Foundation technology for programmable money / economy i.e., Syntax Lexicon Namespace derived from NATO / DoD brevity OPSCODE FFIRN, FFUDNS structured data exchange mapped to symbols for A.I. Big Data. Establishes a consistent, universal syntax structured data exchange library – lexicon using UTZ time stamping data by organization <Org_ID>. data class type, resource type to form a universal syntax, code, date element </tag> Rosetta Stone given all things internet are formed using 1. time epoch cycles 2. syntax as instructions. Physical is the opposite of abstract. See SCOTUS Alice ruling 2014

3. Distributed Autonomous Organization DAO Trade Federation common signaling, telemetry, symbol, and data element sets forming a foundation technology framework including structured data exchange to assist DAO's stay synchronized, stochastically harmonized across UTZ UTC zones.

4. Tether, untether to autonomous trade federations using agile, adhoc NetOps as an option to formal merger, acquisition. Support federations: from Latin: foedus, gen.: foederis, covenant characterized by a union of partially self-governing states or regions

5. Micro to macro-cycle system of systems data updates at agreed upon times observing agreed durations i.e., stock, commodity, currency trade epochs. Discrete time interval start, stop, TTL Time To Live trade windows commands in </108> system heartbeat

6. Algorithmic regulation: firefly inspired heartbeat synchronization algorithm in stocks, currency exchanges is a segue to algorithmic regulation. Improving temporal trade parity between Bitcoin Blockchain & conventional stock exchanges by using the firefly heartbeat algorithm to sample events among trader populations across time zones to establish consensus among disparate trade protocols, trade speed / frequency.

7. The "Grail" A sync'd shared situational awareness view derived from filtering, prioritizing events drawn from a system of systems universal heartbeat message event bus sync delta epoch updates Universal Time Zone UTZ proposal using via improvement to the University of Bologna / Hungary's firefly inspired heartbeat synchronization algorithm by matching firefly synchronization pulse to closest OPTEMPO cycle.

8. Support economist Milton Friedman's K% rule where a CBDC, federal, world currency is derived from sampling lead GDP economic indicators across a global event message bus sync delta changes updating a RWA Real World Asset based commodity index currency.
9. Ecologically sustainable economic epoch time cycles to measure, meter sync delta cyclic changes describes linear sequential, geo-spatial temporal intensity radius hop count econometric metrics, meters where closer is shorter, closer is cheaper, less CO2
10. Data over wired, wireless power lines SLA service level agreement where closer = cheaper given closer involves maintenance of electrical, data equipment infrastructure



Figure 5: Nobel Prize Winning Economist's K% rule / USPTO 13/573,002

The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year. The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase

[illegible]

Alice Corp. v. CLS Bank International, 573 U.S. 208 (2014), was a 2014 [United States Supreme Court](#)^[1] decision about [patent eligibility](#).^[2] The issue in the case was whether certain patent claims for a computer-implemented, electronic [escrow](#) service covered [abstract ideas](#), which would make the claims ineligible for patent protection. The patents

were held to be invalid because the claims were drawn to an abstract idea, and implementing those claims on a computer was not enough to transform that abstract idea into [patentable subject matter](#). Ruling “claims may not direct towards abstract ideas”. Physical (baseball meme) is the opposite of abstract”

Although the *Alice* opinion did not mention software as such, the case was widely considered as a decision on software patents or patents on software for business methods.^{[3][4]} *Alice* and the 2010 Supreme Court decision of [Bilski v. Kappos](#), another case involving software for a business method (which also did not opine on software as such^[5]), were the most recent Supreme Court cases on the patent eligibility of software related inventions since [Diamond v. Diehr](#) in 1981.^[6]



FIGURE 7: FIREFLY HEARTBEAT SYNCHRONIZATION / World Economic Heartbeat

Firefly inspired Heartbeat Synchronization: in a paper entitled Firefly-inspired Heartbeat Synchronization in Overlay Networks by the University of Bologna Trento Italy along with the University of Szeged, Hungary: “Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local “heartbeat” events approximately at the same time. The heartbeat synchronization protocol for overlay networks is inspired by mathematical models

of flash synchronization in certain species of fire flies. Nodes send flash messages to their neighbors when a local heartbeat triggers. Fireflies adjust the phase of their next heartbeat based on incoming flash messages using an algorithm inspired by mathematical models of fire-fly synchronization. Heartbeat synchronization strives to have nodes in a distributed system generate periodic, local “heartbeat” events approximately at the same time. It differs from classical clock synchronization in that nodes are not interested in counting cycles and agreeing on a ID of a current cycle. There is no requirement regarding the length of a cycle with respect to real time as long as a length is bounded, and all nodes agree on it eventually.

Use Case: Economic Reset solution: form economic trade federations incentivizing environment friendly business practices leveraging Bitcoin's micro-payment capabilities supporting the TERRA Trade Reference Currency TRC demurrage handling charge. Closer is cheaper, less fuel, < CO2 carbon emission in smart contract Service Level Agreements.



FIGURE 8 TERRA Trade Reference Currency / Crypto micro payment Demurrage fees

Nobel Prize winning Economist Milton Friedman’s K% rule is what I call an “economic heartbeat” K-Percent Rule. DEFINITION of ‘K-Percent Rule’. The K-Percent Rule was a proposal by economist Milton Friedman that the central bank should increase the money supply by a constant percentage every year. The K-Percent Rule proposes to set the money supply growth at a rate equal to the growth of real GDP each year. K-Percent Rule— Investopedia

<http://www.investopedia.com/terms/k/k-percent-rule.asp>

Currency / Economic RESET is a mathematical certainty. Do we RESET the global system of systems as is or re-engineer our world using NATO / DOD system of systems engineering framework standing on the shoulders of giants swords to plowshares ?

IF climate change causes a drop in crop commodity by 20–25 % while population grows, THEN this condition will become a matter of national security. THEN this will require revisiting Belgian Economist Bernard Lietaer's TRC Trade Reference Currency ELSE face chaos by not leveraging proven system of systems, procedures, processes, tactics, etc..



Figure 9: Nobel Prize Winning Economist Milton Friedman's K % GDP based rule

Economist Milton Friedman predicted the rise of a computer capable of automatically adjusting the inflation rate of money. This is precisely what we see in the case of bitcoin, as a regulatory algorithm intelligently adjusts the mining difficulty to make the issuance of blocks more or less easy depending on the demand for network hashing power. No money system we have seen to date can claim it is chronologically regulated. The universal construct of time is the backbone of the cryptocurrency digital economy. Investopedia K % Rule [Source: https://investopedia.com/terms/k/k-percent-rule.asp](https://investopedia.com/terms/k/k-percent-rule.asp)

Satoshi Nakamoto's Bitcoin key building block is a time stamp server. "Bitcoin is intended to be paired with the market place" "the blockchain stores references to market indexes"

Demurrage: term used in currency trading to denote cost of currency ownership and/or storage. cost of carrying money... considered superior to interest payments, as it stimulates currency circulation and economic growth. "In a physical sense, demurrage represents a delay that occurs during the transportation of goods via truck. When this happens, the trucking firm delivering the product can opt to pay a flat fee to the receiver to cover any loss incurred as a result of the delay. This fee can be assessed on an hourly basis. Or in the case of gold, demurrage is simply the costs associated with storage of bouillon. [LINK](https://investopedia.com/terms/d/demurrage.asp)

Structured Data Exchange

SYNTAX LEXICON ROSETTA STONE

Coder's Guide

lexicon

STRUCTURED <CONTENT> EXCHANGE TEMPLATES

MIL STD 2525ABC

ASSET TOKENS

"SYMBOLS RULE THE WORLD"

11.8 - Kinemat

11.8.1 - Pos

11.8.1.1 - 11.8.1

1.2.3 - Predicted

1.2.4 - Smoothed Data

1.3 - Position

1.3.1 - Bearing Angle

1.3.2 - Location, 2D Hor

1.3.3 - Vertical

1.3.3.1 - Horizontal

1.3.3.2 - Vertical

1.3.3.3 - Velocity

1.3.3.4 - Confidence

1.3.3.5 - Bearing Angle Rate

1.3.3.6 - Covariance Matrix

DDL DATA DEFINITION LANGUAGE

TOSCA

YAML

XBRL

BINARY XM

UBL

STRATML

XAML

Signal operating instructions (SOI): technical control coordination of signaling, telemetry Current situational awareness, data dictionary, network identification, channels, network directory, brevity code-words, signals. Units maintain 2 SOI copies: PEACE TIME version "Go-To-War" version = BIZ COA (s) <Org_ID1><Org_ID2><Org_ID3>

NATO MESSAGE TEMPLATES USE DATA SETS FOR STRUCTURED DATA EXCHANGE // POSITION FIELD IN MESSAGE PROCESSED BY TABLE, FIELD # IN A CONSISTENT, PREDICTABLE ORDER = AI FRIENDLY M2M AI

GOAL: vide a common lexicon / syntax / term library used among FEDERATIONS identified by Federated ID

GOAL: Provide a common, consistent, reliable schedule to share signaling and telemetry within federations.

MTL Machine Trust Language

vector

MESSAGE TEXT FORMAT:

SEG RPT OCC CLASSNAME SETID SEQ FIELD OCCURRENCE SET FORMAT NAME

O 11NUPRES EXER 1 /M /O // (NU) EXERCISE IDENTIFICATION

C 11NUPRES OPER 2 /M /O /O /O // (NU) OPERATION CODEWORD

M MIOPV1 1 MSGID 3 /M /M /O /O /O // (NU) MESSAGE IDENTIFIER

M MIP OUT ORDPLAN 4 /M /O /O /O // (NU) PLAN ORDER REFERENCE

SIOP >OUT MSGREF 5 /M /M /M // (NU) REFERENCED MESSAGE

JUPRES DTG 6 /M // (NU) DATE-TIME GROUP

O ORGID 7 /M /M /M /M /M /M /M /M /M /C // (NU) ORGANIZATION DESIGNATOR

M 11NUPRES GENTEXT 8 /M /M // (NU) 1.A ENEMY FORCES / COMPETITORS

M 11NUPRES GENTEXT 9 /M // (NU) 1.B FRIENDLY FORCES / TRADE FEDERATION

M 11NUPRES GENTEXT 10 /M /M // (NU) 1.C ATTACHMENT / DETACHMENT

O 11NUPRES GENTEXT 11 /M /M // (NU) 1.D COMMANDERS EVALUATION

O 11NUPRES GENTEXT 12 /M /M // (NU) 1.E ENVIRONMENTAL INFORMATION

M 11NUPRES GENTEXT 13 /M /M // (NU) 2. MISSION </108>K00.99 / FIX / SWIFT / E-911 Heartbeat Message

M 11NUPRES GENTEXT 14 /M /M // (NU) 3.A CONCEPT OF OPERATION

O 11NUPRES GENTEXT 17 /M /M // (NU) (3) RECONNAISSANCE SURVEILLANCE

O 11NUPRES GENTEXT 21 /M /M // (NU) (5) INFORMATION OPERATIONS

O 11NUPRES GENTEXT 28 /M /M // (NU) (5) COMMS INFORMATION SYSTEMS

O 11NUPRES GENTEXT 35 /M /M // (NU) 3.D COORDINATING INSTRUCTIONS

M 11NUPRES GENTEXT 36 /M // (NU) 4.A SUPPORT CONCEPT (Logistics)

M 11NUPRES GENTEXT 37 /M // (NU) 4.B MATERIEL AND SERVICES

SYMBOLS

Friend	Neutral	Hostile
Partner		Competitor

TOKENIZED ECONOMY BREVITY CODE OPSCOE MAPPET TO SYMBOLS

INFOCON

4 3 2 1

INFORMATION CONDITION

INDEX REFERENCE #

M015 STATUS

EFFECTIVE: 14-DEC-99

PURCHASE CODES

FEDERATED PEGS

ISO 10383 - MIC

Market Identifier Codes

STOCK

NDN NAMED DATA

EXCHANGE

NETWORKING

MIC CODES

PRECEDENCE

PROCESSING

FILTERS

BLOCKTIME

ARBITRAGE

ERLANG

TIME

EQUATIONS

Fig 10: Syntax Lexicon Library Rosetta Stone from DoD / NATO system of systems framework

Common syntax library of various Message Text Formats MTF to enable universal signaling / telemetry among a system of systems is ESSENTIAL. Decades of research at the taxpayer's expense into structured messaging / structured data exchange where the location, type of data identified by table number will help accelerate the process of organizing syntax into categories from disparate systems into data set reference repositories. Many semantic, syntax tags will be

reusable. The rules, roles and logic developed by years of research involving thousands of subject matter experts solving real world issues is the value to be extracted from 300+ message sets. NATO stays synchronized across many languages and cultures so why reinvent the wheel?

MESSAGE CATALOG: The USMTF message library has over 300 messages to choose from to facilitate information exchange requirements. MTFs presenting data in a logical, well specified and unambiguous layout. MTFs are transmission medium neutral. The content of the Message Catalogue has been developed by military operators over the last 20 years. Messages are regularly maintained to keep pace with the latest tactics and doctrine. **Military brevity codes and stock exchange codes are similar. security Identifier used in financial markets are: SYMBOL, CUSIP, ISIN, SEDOL, RIC Code, Syntax Lexicon Library**

Github: <http://github.com/Beacon-Heart>

[#quantum](#) [#quantumcomputing](#) [#blockchain](#) [#IP](#) [#AI](#)

FEDCOIN / WORLDCOIN Synchronization / stochastic harmonization

One world currency for the one world government requires financial events stochastically synchronized, harmonized across the world's time zones and will represent a value index of the world's GDP Gross Domestic Product RWA real world asset commodities.

"The economy of imaginary wealth is being inevitably replaced by the economy of real and hard assets" President Vladimir Putin **Closer is cheaper, < fuel, less C02 carbon**

The world's system of systems needs to be time-space synchronized, stochastically harmonized across the one world, global UTZ Universal Time Zone via heartbeat messages using universally shared, standards based OPSCODE brevity codes drawn from a universal structured data exchange syntax lexicon with over 300 use case templates e.g., NATO's lexicon library. Universal Time Zone UTZ proposal using via improvement to the University of Bologna / Hungary's firefly inspired heartbeat synchronization algorithm by matching the firefly synchronization pulse to the closest OPTEMPO sync cycle.

SOCIAL MEDIA / DOCUMENTS / GRAPHICS

Linked IN: <https://www.linkedin.com/in/ecoeconepochs/>

FACEBOOK: <https://www.facebook.com/beaconheart>

Github: <http://github.com/Beacon-Heart>

IPFS Interplanetary File System Web3 web page. <https://ecoeconomicepochs.dao/>

SCRIBD Documents: <https://www.scribd.com/user/11781571/Steven-James-McGee>

Slideshare Files: <https://www.slideshare.net/EcoEconomicHeartbeat>

X / Twitter: https://twitter.com/Heart_Beacon



Figure 11: Steven "FutureMan" McGee's Business Card / Contact Information



Buckminster Fuller's The World Game: Utopia or Oblivion? A Swords to plowshares solution. Nobel Prize winning Economist Milton Friedman "only a crisis real or imagined brings change and makes the politically impossible the politically inevitable" / Milton Friedman's K% rule to automate, algorithmically regulate "the Fed"/ central banks creation, limitation of money / liquidity

Documents / Slides / Papers: GitHub: <http://github.com/Beacon-Heart>

