

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



Figure 1: USPTO 13/573,002 Telemetry for The World Game Great's Great redesign
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

QUOTE: "There is only one revolution tolerable to all men, all societies, all political systems: Revolution by design and invention". Richard Buckminster Fuller author of The World (Peace) (simulation) Game book, futurist, environmentalist: <http://bfi.org>



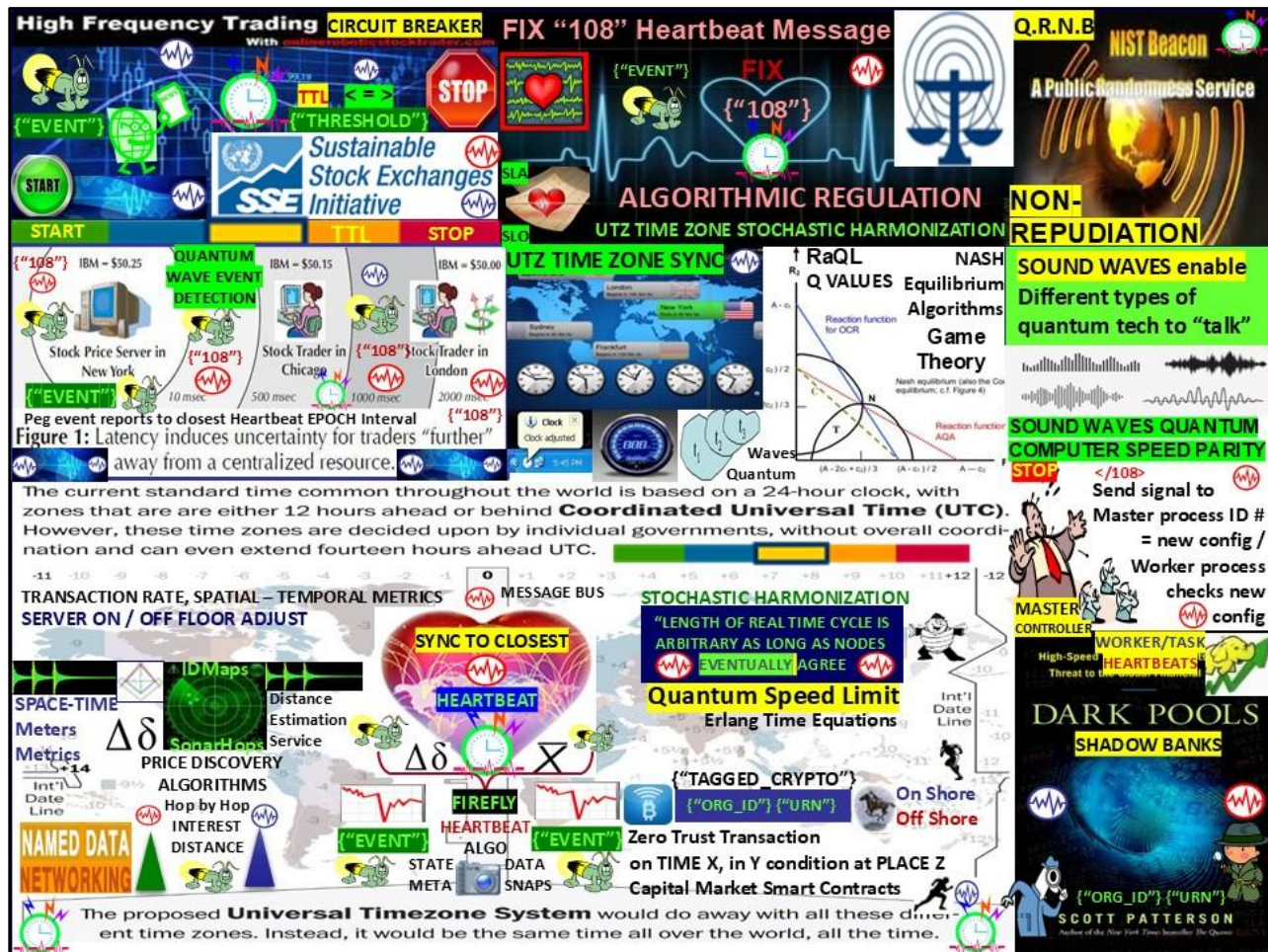


Figure 3: USPTO 13/573,002 / SSEI Sustainable Stock Exchange Initiative

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.

USE CASES

1 Supreme Court SCOTUS US SC 573 US 134 2347 Alice Corp Vs CLS Bank compliant, conformant physical meme i.e., cryptocurrency blockchain Digital Ledger Technology DLT programmable money for a programmable economy multi use meme

2 Foundation technology for programmable money / economy i.e., (re) monetizing (crypto) currencies, 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 Rosetta Stone given all things internet are formed using 1. time epoch cycles 2. syntax as instructions

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 in achieving, remaining, synchronized, stochastically harmonized across UTZ time zones.

4 Tether, untether to autonomous DAO Distributed Autonomous Organization i.e., 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 under a central government.

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

6 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.

7 The "Grail" A synchronized, common, shared situational awareness view filtered, prioritized events drawn from a system of systems heartbeat message event bus sync delta epoch updates Universal Time Zone UTZ proposal using via improvement to the University of Bologna / Hungary's . China's firefly inspired heartbeat synchronization algorithm by matching firefly synchronization pulse to closest OPTEMPO epoch 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 data, event changes updating for example, a RWA Real World Asset based commodity Real World Asset RWA index backed currency.

9 Establish, maintain Ecologically sustainable economic econometric epoch time cycles supporting universal standard measures, meters, metrics sync delta cyclic update temporal changes describing linear sequential, geo-spatial temporal intensity radius hop count econometric metrics and meters where closer is shorter, closer is cheaper, less CO2 carbon dioxide credits as environmental control in SLA Service Level Agreements

10 Data over wired, wireless energy power lines SLA service level agreement where closer = cheaper given closer involves maintenance of electrical, data infrastructure

11. USE CASE: Climate change impact on food production: given food, fertilizer shortages (wheat, sunflower, soybean...), energy, fuel prices and looming fuel rationing, it logically follows that the world has no other options than to organize both micro (local) and macro (global) economies observing space - time conservative SLA Service Level Agreements where closer = cheaper given closer = less fuel, CO2, time resources used to produce, ship.. Demurrage fees incentivize conservation of resources, commodities i.e., discounts for locally produced, consumed goods and commodities. It is TIME.

12. USE CASE: Telemetry, syntax lexicon support for economist Milton Friedman's K% rule where a FEDCOIN / WORLDCOIN currency is supported from sampling lead economic indicators i.e., commodity RWA Real World Assets measurable, tangible, tokenized assets polled from a universal event bus applying firefly-heartbeat algorithm event changes leveraging it's intrinsic messaging heartbeat functions, updating a statistical mean value index. Nobel Prize winning economist Milton Friedman described an "economic heartbeat" in his K% rule where the Treasury increases the money supply increases and decreases pegged to increases, decreases in GDP index volume.

13. USE CASE: Leverage DOD / DARPA / NATO's decades of work developing system of systems engineering best practice that involves development of over 300 message, structured data exchange spreadsheet templates of pre-packaged OPSCODE brevity codes organized in sets to support pre-defined, situation specific workflows, smart contracts in logistics, finance, and probability and statistically likely situation awareness, situation specific action – reaction supporting Artificial Intelligence and machine learning. Leverage DOD / DARPA / NATO's decades of work developing system of systems engineering best practice that involves development of over 300 message, structured data exchange spreadsheet templates of OPSCODE brevity codes organized in sets in awareness, situation specific action – reaction in Artificial Intelligence machine learning.

14. Sound waves (see water drop in pond meme, graphic) as the basis for establishing common, shared, universal method and means to communicate telemetry across a plurality of quantum computing system of systems using a system comprised with curved electrodes to concentrate sound waves that is similar to the use of a magnifying lens to focus a point of light at room temperature using sound waves rather than use of liquid hydrogen to cool a space in an attempt to slow quantum particles for event sampling.



FIGURE 4 Thesis / Summary

THESIS: 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 mentioned 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)

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"



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 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 gross domestic product (GDP) each year. In the United States, this would typically be in the range of 2-4%, based on historical averages. The K-percent rule, proposed by economist and Nobel Prize winner Milton Friedman Milton Friedman Milton Friedman was an American economist who advocated for free market capitalism. Friedman's freemarket theories influenced economic, is a monetary policy rule that requires central banks to increase the money supply irrespective of the condition of the economy. Supporting economist Milton Friedman's K% rule where a "FEDCOIN / WORLDCOIN currency could be derived from sampling lead economic indicators across a global, universal event bus applying the firefly-heartbeat algorithm tracking changes, updating a GDP commodity statistical mean value index of GDP Real World Assets RWA.



FIG 6 SCOTUS Alice Corp Vs CLS Bank “claims may not direct towards abstract ideas”

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

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**

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** {"TRANSACTION ID"} {"URN"} {"URN"} INDEX REFERENCE # M015 STATUS: EFFECTIVE: 14-DEC-99

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 // (NU) OPERATION CODEWORD
M MIOPV1 1 MSGID 3 /M /M /O /O /O // (NU) MESSAGE IDENTIFIER DISTANCE
M MIP OUT ORDPLAN 4 /M /O /O /O // (NU) PLAN ORDER REFERENCE NDN
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 /C // (NU) ORGANIZATION DESIGNATOR
M 11NUPRES GENTEXT 8 /M /M // (NU) 1.A ENEMY FORCES / COMPETITORS
M 11NUPRES GENTEXT 9 /M /M // (NU) 1.B FRIENDLY FORCES / TRADE FEDERATION DAO
M 11NUPRES GENTEXT 10 /M /M // (NU) 1.C ATTACHMENT / DETACHMENT INTEREST
O 11NUPRES GENTEXT 11 /M /M // (NU) 1.D COMMANDERS EVALUATION
O 11NUPRES GENTEXT 12 /M /M // (NU) 1.E ENVIRONMENTAL INFORMATION {"Org_ID"}
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 STOCK NDN NAMED DATA
O 11NUPRES GENTEXT 21 /M /M // (NU) (5) INFORMATION OPERATIONS EXCHANGE NETWORKING
O 11NUPRES GENTEXT 28 /M /M // (NU) (5) COMMS INFORMATION SYSTEMS MIC CODES PRECEDENCE
O 11NUPRES GENTEXT 35 /M /M // (NU) 3.D COORDINATING INSTRUCTIONS FILTERS PROCESSING
M 11NUPRES GENTEXT 36 /M /M // (NU) 4.A SUPPORT CONCEPT (Logistics)
M 11NUPRES GENTEXT 37 /M /M // (NU) 4.B MATERIAL AND SERVICES
SYMBOLS Friend Neutral Hostile MEDICAL EVAC & HOSPITALISATION
Partner Competitor - MILITARY OPERATIONS

STRUCTURED <CONTENT> EXCHANGE TEMPLATES
MIL STD 2525ABC
ASSET TOKENS
"SYMBOLS RULE THE WORLD"
STRATML
XBRL
DDL DATA DEFINITION LANGUAGE

PURCHASE CODES
FEDERATED PEGS
ISO 10383 - MIC
Market Identifier Codes
STOCK
EXCHANGE
MIC CODES
PRECEDENCE
PROCESSING
BLOCKTIME
ARBITRAGE
ERLANG
TIME
EQUATIONS

TOKENIZED ECONOMY BREVITY CODE OPSCOSE MAPPET TO SYMBOLS

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**

CONTACT / SOCIAL MEDIA

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