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June 2004 - Simple Always Wins Concepts LLC incorporated – a woman owned micro-business. Owner's father is Blackfoot Indian. Web Page [LINK](http://sawconcepts.com/index) <http://sawconcepts.com/index>

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United States Patent and Trademark patent application #13,573,002 2004-17 [LINK](#)

LINKED IN: <http://linkedin.com/in/sawconcepts> [LINK](#)

Slideshare / [LINK](http://slideshare.net/StevenMcGee2/) <http://slideshare.net/StevenMcGee2/>

GITHUB: [LINK](https://github.com/Beacon-Heart/Heart_Beacon): https://github.com/Beacon-Heart/Heart_Beacon

SCRIBD Documents, Slides <https://www.scribd.com/user/11781571/Steven-McGee> [LINK](#)

TWITTER: http://twitter.com/Heart_Beacon [LINK](#) OneDrive Document Folder

WordPress Page: [LINK](#) / PATREON [LINK](#): https://patreon.com/beacon_heart

The Heart Beacon Cycle Time — Space Meter USPTO 13/573,002 is built standing on the shoulders of giants. Milton Friedman and his K% rule, Admiral "Amazing Grace" Hopper and the world's first computer compiler and the alpha-numeric brevity codes still ideal for today's Internet of Things and Artificial Intelligence... not to mention telemetry with E. T's who are thought to use artificial intelligence drones to explore the vast, perilous expanse of space.



Standing on the shoulders of giants – Heart Beacon Cycle Time – Space Meter Applique' Overlay



FIGURE 1: The Heart Beacon Cycle Time – Space Meter Adaptive Procedural Template [LINK](#)

The Heart Beacon Cycle (HBC): Swords to plowshare re-use of tax subsidized best practice. Military's do one thing very well: individuals join groups (units) synchronized in time-space to accomplish common goals. Adaptive use case: geo-spatial, temporal econometrics, vectors to reduce CO₂ carbon footprint due to inefficient transport, resource, logistic vectors. The HBC applies a novel use of an algorithm based on nature and NATO best system of systems engineering practice. It includes geo-spatial, temporal metrics, measures, and Incentives for ecologically sound geo-spatial, temporal econometrics. It is an adaptive procedural template checklist of things, processes, tools, building blocks useful to form, maintain Eco-responsible trade federations. Each item in the procedural template checklist links to a treatise. <http://sawconcepts.com/index/id79.html>

We can synchronize ourselves and our cities in time - space for a common purpose: ecologically sound econometrics i.e., through use of a Signals and Telemetry annex for Buckminster Fuller's Operations Manual for Spaceship Earth. The HBC involves a heartbeat flash message universal event, alert message bus. It is based on NATO's best practice, 300 + structured data exchange templates, micro-macro (economic) situational awareness sync delta data exchange schedule. The Heart Beacon cycle includes a universal metrics measurements physical meme (see Supreme Court Alice Corp Vs CLS Bank) for use among myriad Bitcoin Blockchain internet of money Block-time arbitrage memes to support standardization and synchronization of a one world economic system of systems [LINK](#) <http://sawconcepts.com/index/id56.html>



FIGURE 2: Battlefield Digitization – Net Enabled Operations NEO / HBC synergy [LINK](#)

The Heart Beacon Cycle (HBC): Swords to plowshare re-use of tax subsidized best practice. Military's do one thing very well: individuals join groups (units) synchronized in time-space to accomplish common goals. Adaptive use case: geo-spatial, temporal econometrics, vectors to reduce CO₂ carbon footprint due to inefficient transport, resource, logistic vectors. The HBC applies a novel use of an algorithm based on nature and NATO best system of systems engineering practice. It includes geo-spatial, temporal metrics, measures, and Incentives for ecologically sound geo-spatial, temporal econometrics. It is an adaptive procedural template checklist of things, processes, tools, building blocks useful to form, maintain Eco-responsible trade federations. Each item in the procedural template checklist links to a detailed treatise. We can synchronize ourselves and our cities in time - space for a common purpose: ecologically sound econometrics i.e., through use of a Signals and Telemetry annex for Buckminster Fuller's Operations Manual for Spaceship Earth. The HBC involves a heartbeat flash message universal event, alert message bus. It is based on NATO's best practice, 300 + structured data exchange templates, micro-macro (economic) situational awareness sync delta data exchange schedule. The Heart Beacon cycle includes a universal metrics measurements physical meme (see Supreme Court Alice Corp Vs CLS Bank) for use among myriad Bitcoin Blockchain internet of money blocktime arbitrage memes to support standardization of a one world economic system



FIGURE 3: Economic Heartbeat

The Heart Beacon Cycle Time – Space Meter and Applique' Overlay: Procedural Template checklist of things useful to form, maintain equitable trade federations Each item in the procedural template checklist links to a detailed treatise technical description.

The Heart Beacon Cycle is a swords to plowshare project reusing military Net Centric Warfare signaling, telemetry and Distributed Autonomous organization DAO methods – a term coined by the RAND Corporation DoD Think Tank circa 2001.

The Heart Beacon Cycle is a Signals and Telemetry annex for Buckminster Fuller's Operations Manual for Spaceship Earth. These luminaries standing on a systems of systems engineering framework synchronizing NATO — with improvements such as Bitcoin, Internet of Money universal meme forms Sustainability's Mount Rushmore if you will.



Figure 4: Universal Time Zone UTZ Synchronization <http://sawconcepts.com/index/id48.html>

Cyclic updates of state meta data snapshots / heartbeat messages from micro-to macro (economic) cycles sync'd and distributed among a system of systems is simply powerful. [LINK](#)

FIREFLY INSPIRED HEARTBEAT ALGORITHM University of Bologna / University of Hungary [LINK](#):
UTZ: Universal Time Zone proposal / The Heart Beacon Cycle patent application 13,573,002

The UTZ proposal is facilitated by use of firefly inspired heartbeat synchronization / Firefly - Heartbeat Algorithm developed by the University of Bologna Italy / University of Hungary for stochastic harmonization of telecommunication mesh fabrics.

Patent application 13,573,002 improves upon the Firefly - Heartbeat algorithm by matching the algorithm's striving to synchronize activity to the closest heartbeat cycle to establish a universal time zone synchronization pulse. This would reduce the volume of FOREX trading estimated to be 5 trillion daily that is due to transactions for transactions sake taking advantage of time zone, time-space differentials by speculators. This technique would also help improve Bitcoin Blockchain transactions which are all about time ordering of transactions to account for time-space differences and time-space stochastic harmonization challenges.



FIGURE 5: FIREFLY INSPIRED HEARTBEAT SYNCHRONIZATION / World Economic Heartbeat

The Firefly-heartbeat sync algorithm will emulate Spaceship Earth's collective planetary brain neural (telco mesh fabrics) networks. The algorithm will support a World Economic Heartbeat powered by the firefly inspired heartbeat synchronization algorithm proposed by the University of Bologna Italy and Hungary supporting economist Friedman's K% Rule / Belgian economist TERRA TRC Trade Reference Currency See [LINK](http://sawconcepts.com/index/id22.html) <http://sawconcepts.com/index/id22.html>

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. The goal is to guarantee that all nodes start and end their cycles at the same time, with an error that is at least one, but preferably more, orders of magnitude smaller than a chosen cycle length.

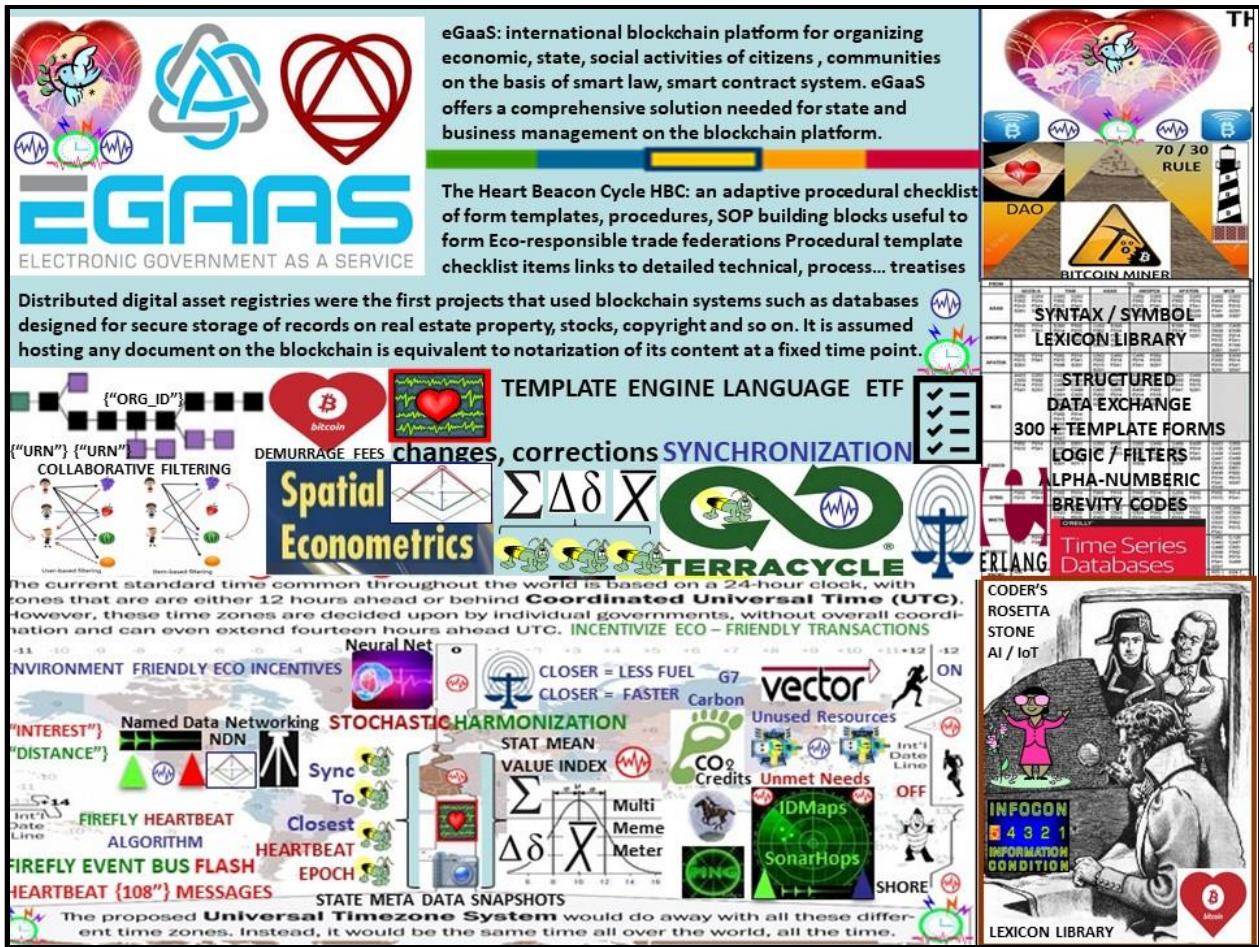


FIGURE 6: Electronic Government as a Service / Heart Beacon Cycle synergy

Coming world economic & earth climate changes – what's the plan? [LINK](http://bit.ly/2tU01g1)

Cyclic updates of state meta data snapshots / heartbeat messages from micro-to macro (economic) cycles distributed among a system of systems is simply powerful. The Internet is based on time cycles and (computer) syntax parsed / processed or not during finite time cycles. It requires a syntax library lexicon -- a Rosetta Stone if you will. The firefly inspired heartbeat algorithm includes flash heartbeat messages that act as a universal event / alert message bus.

eGaaS, an international Blockchain platform for organizing the economic, state and social activities of citizens and their communities on the basis of smart law and smart contract system Electronic Government as a Service.

eGaaS implements four basic functions needed for efficient transfer of most types of government, legislative bodies and business activities into Blockchain technology:

- financial system
- registry structure
- smart contract algorithm
- smart law formation and execution mechanism

In eGaaS a mechanism is implemented for formation and execution of smart laws. Smart laws are algorithms describing the rules and conditions regulating the execution of state laws.



FIGURE 7: Everyday can be Earth Day on the Bitcoin Blockchain [LINK](#)

<http://sawconcepts.com/index/id56.htm>

RBF "the secret to change is build a new model that makes the old model obsolete"

RBF "Earth is a spaceship that cannot be resupplied" = pledge our fealty to Spaceship Earth ?

WHAT IF EVERYDAY IS SPACESHIP EARTH DAY? What if we formed economic trade federations incentivizing environment friendly business practices leveraging Bitcoin's micro-payment capabilities supporting the TERRA Trade Reference Currency TRC demurrage resource handling charges supporting the TERRA Trade Reference Currency TRC by economist Lietaer? For example, closer = cheaper, closer = less fuel used ?

Satoshi Nakamoto: "#Bitcoin is intended to be paired with a market place" "the blockchain stores references to market indexes" The Particl system combines a Bitmessage-style network with anonymous payment schemes to create a privacy-centric marketplace. Particl White Paper [LINK](#) Globalization involves multi-national corporate entities vying for control of regional resources. It follows that a proven strategy to identify, track, and monitor resources regionally within the global economic matrix is needed. Thomas Edison and Henry Ford proposed a currency based on a commodity basket index circa 1921. Now there is Bitcoin programmable money and the internet's heartbeat, heartbeat messages. All things internet are formed by code formed by time cycles used / not used to process, parse {"syntax"}. Therefore, time cycles and a Rosetta Stone syntax lexicon library are the two main building blocks to provide the building blocks for Governance 2.0. [LINK: https://www.supermoney.com/2014/06/thomas-edisons-view-money/](https://www.supermoney.com/2014/06/thomas-edisons-view-money/)

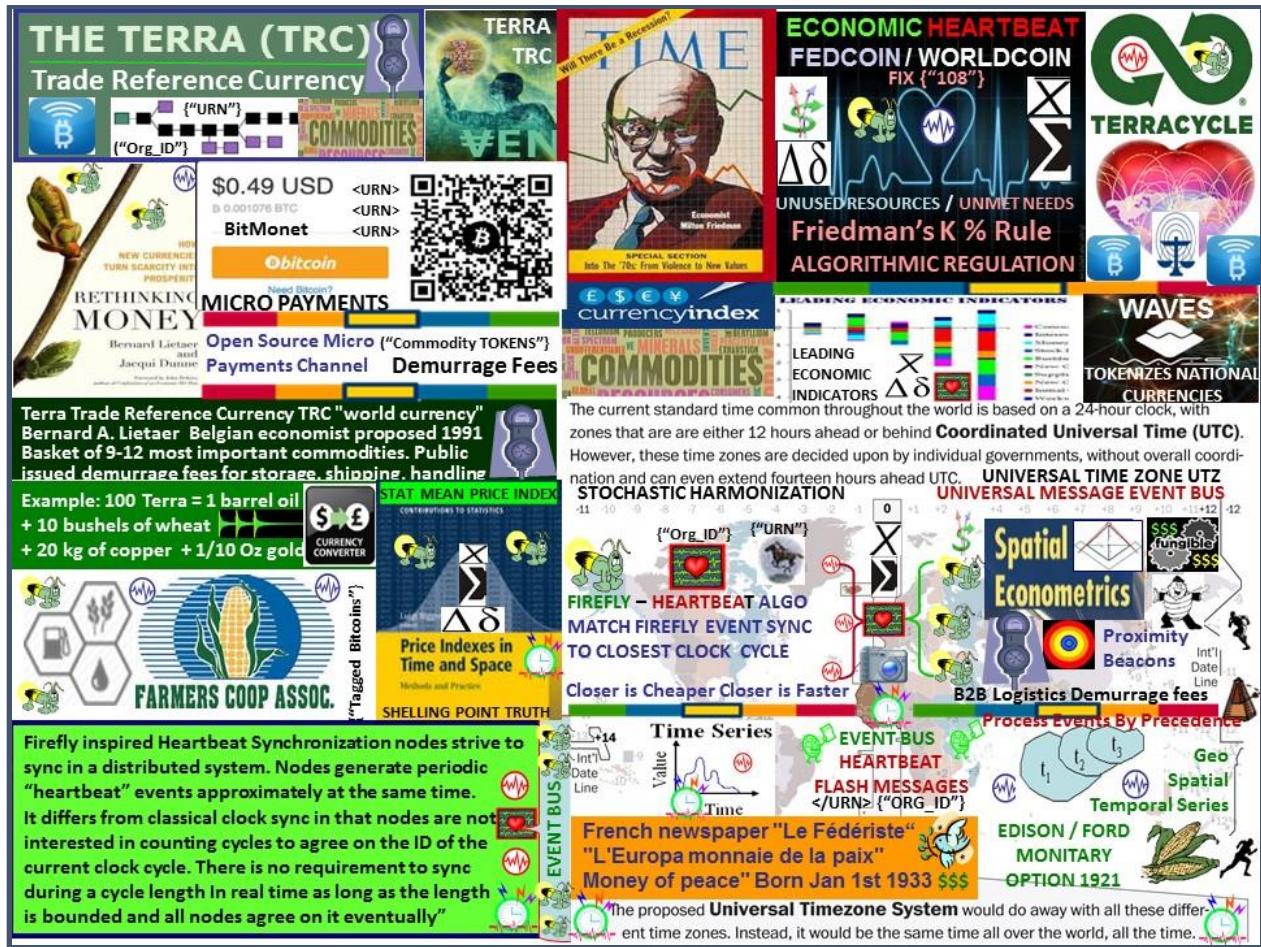


FIGURE 8: TERRA TRADE REFERENCE CURRENCY TRC / BITCOIN MICRO PAYMENTS [LINK](#)

The Terra is a global complementary currency designed to provide an inflation-resistant international standard of value; to stabilize the business cycle on a global level; and to realign stockholder's interests with long-term sustainability. Few know that Edison and Henry Ford recommended a national currency based on a commodity index. Edison thought that crops held their values best over time. Economist Bernard Lietaer's TERRA Trade Reference Currency is ideal given the rise of Bitcoin and the Blockchain's micro-payment capability in concert with the TERRA TRC's demurrage parking, shipping and handling fees. The TERRA Trade Reference Currency: complementary, privately issued, demurrage-charged, backed by inflation-resistant, standardized basket of the dozen most important commodities, services and operates in parallel with national currencies. Terra The Trade Reference Currency, TRC "world currency". Proposed by Belgian economist and expert on monetary systems Bernard A. Lietaer in 2001, based on a similar proposal from the 1930s. The currency is meant to be based on a basket of the 9-12 most important commodities (according to their importance in world wide trade). Terra = reference unit defined as standardized basket of key internationally traded commodities & services. Macro to micro reporting is key to establishing a value index for the Internet of Everything IoT through use of reliable time stamping by <Org_ID>, <URN>

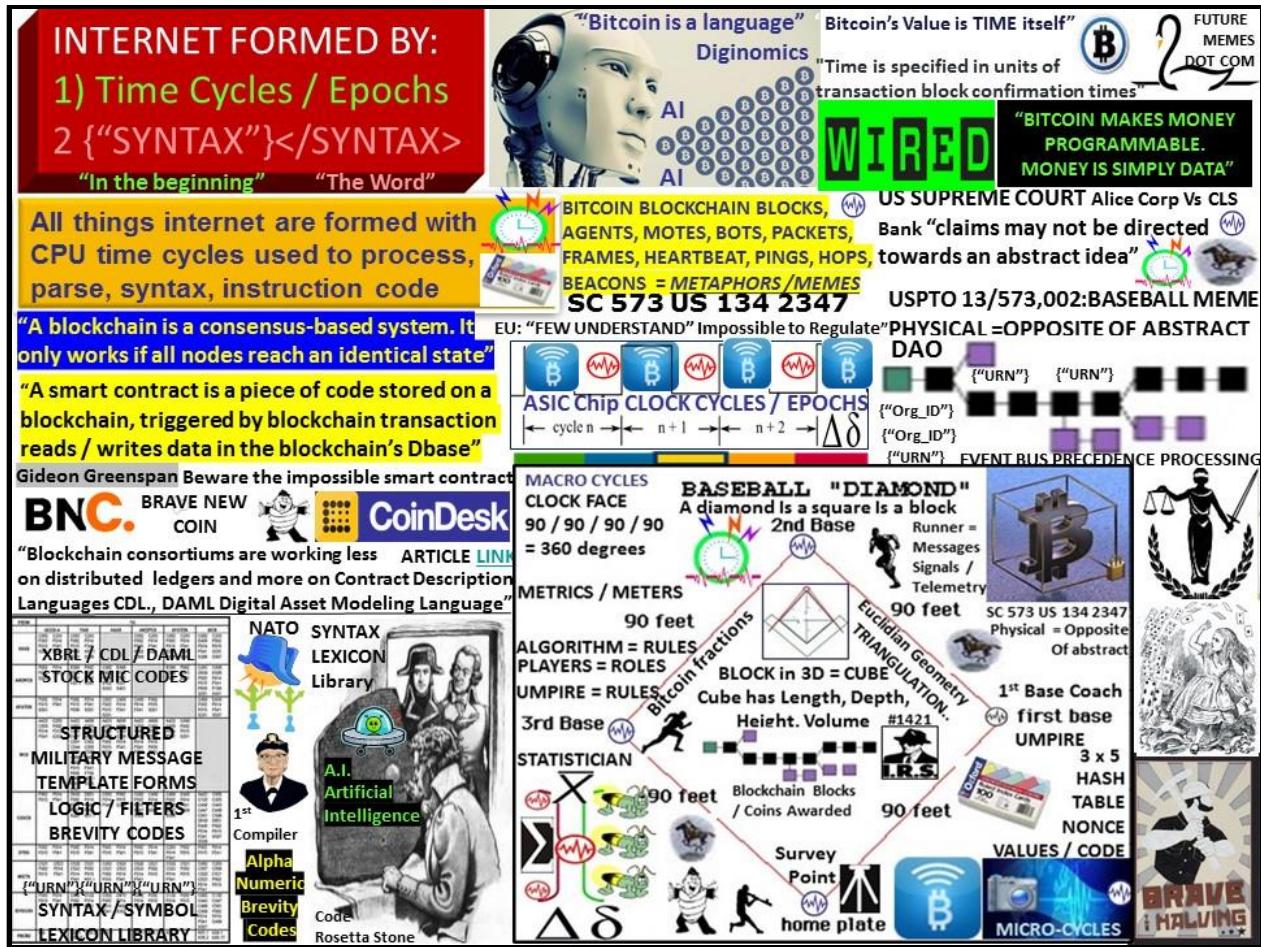


FIGURE 9: US SUPREME COURT RULING: CLAIMS MAY NOT DIRECT TOWARDS ABSTRACT IDEAS [LINK](#)

A computer chip creates time cycles to process syntax as instructions - period. See Supreme Court Alice Corp Vs CLS Bank "a claim may not be directed towards an abstract idea" Bitcoin blockchain blocks, agents, motes, bots, web crawlers, heartbeat, beacon are all metaphors for intervals, time cycles available to process / not process SYNTAX. The internet is coded, programmed using time cycles available to process instructions, commands etc. It follows that the key to achieving consistency, interoperability across diverse technologies and establishing a consistent, systemic one world economic system of systems is to focus on the two main common building blocks -- time cycles and syntax. Syntax may be represented by <XML> {"JSON"} or form fields "FFIRN's", "FFUDNS" in structured military messaging where the form number and field position in the form has significance for parsing, processing. The idea is to reuse the logic behind structured military messaging and in many cases e.g., vectors, the form field unit identifiers themselves in commercial use cases. A method to convert among the myriad metaphors and memes -- a Rosetta Stone syntax lexicon library is needed. The military adopted the policy of only sending changes or "heartbeat sync deltas" for the same reason the Bitcoin community must adopt the same paradigm. Sending the changes, not the entire document or the "sync delta's" in military parlance conserves bandwidth and increases throughput.



FIGURE 10: UNIVERSAL SIGNALS EVENT BUS / TIME SPACE METER / HFT CIRCUIT BREAKER [LINK](#)

A use case of the firefly inspired heartbeat synchronization algorithm in stock and currency exchanges is algorithmic regulation. For example, improving temporal trade parity between Bitcoin Blockchain & conventional stock exchanges by using the firefly-heartbeat algorithm to take trade speed samples among trade populations across time zones to determine an optimal trade speed / frequency as a statistical mean. Trading velocity far exceeds Bitcoin's current transaction rates estimated to be between 3 - 7 transactions per second and far exceed non-HFT trading capacity. A method is needed to establish temporal trade parity and account for on floor / off floor trading disparity -- enter STAAS Space - Time As A Service using a novel stochastic harmonization algorithm based on the mating behavior of certain species of fireflies that strive to sync during mating activity matched to the closest Operational Tempo OPTEMPO heartbeat cycle. [LINK: https://en.wikipedia.org/wiki/Friedman's_k-percent_rule](https://en.wikipedia.org/wiki/Friedman's_k-percent_rule)

#dow20k Time for algorithmic regulation, World Economic Forum's HFT Trade circuit breaker / High Frequency Trade / #blockchain speed parity [LINK](#) <http://sawconcepts.com/index/id18>



FIGURE 11: ETHEREUM – CASPER / Heart Beacon Cycle 13/573,002 [LINK](#)

Quote from @DCCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block. A block is awarded using age (time) or vectors (time / direction / velocity) or voting (tournament league board). A baseball tournament is played on baseball diamonds that are as physical and tangible as it gets -- in every town in America. US Supreme Court Ruling Alice Corp V CLS Bank: "claims ineligible for patent protection under 35 U. S. C. §101 "directed to an abstract idea" ALICE CORP v CLS BANK <http://1.usa.gov/1V91pQe> LINK The Heart Beacon Cycle patent application 13,573,002 is described using a physical baseball league tournament. Physical is the opposite of abstract and therefore, is Alice V CLS Bank compliant.

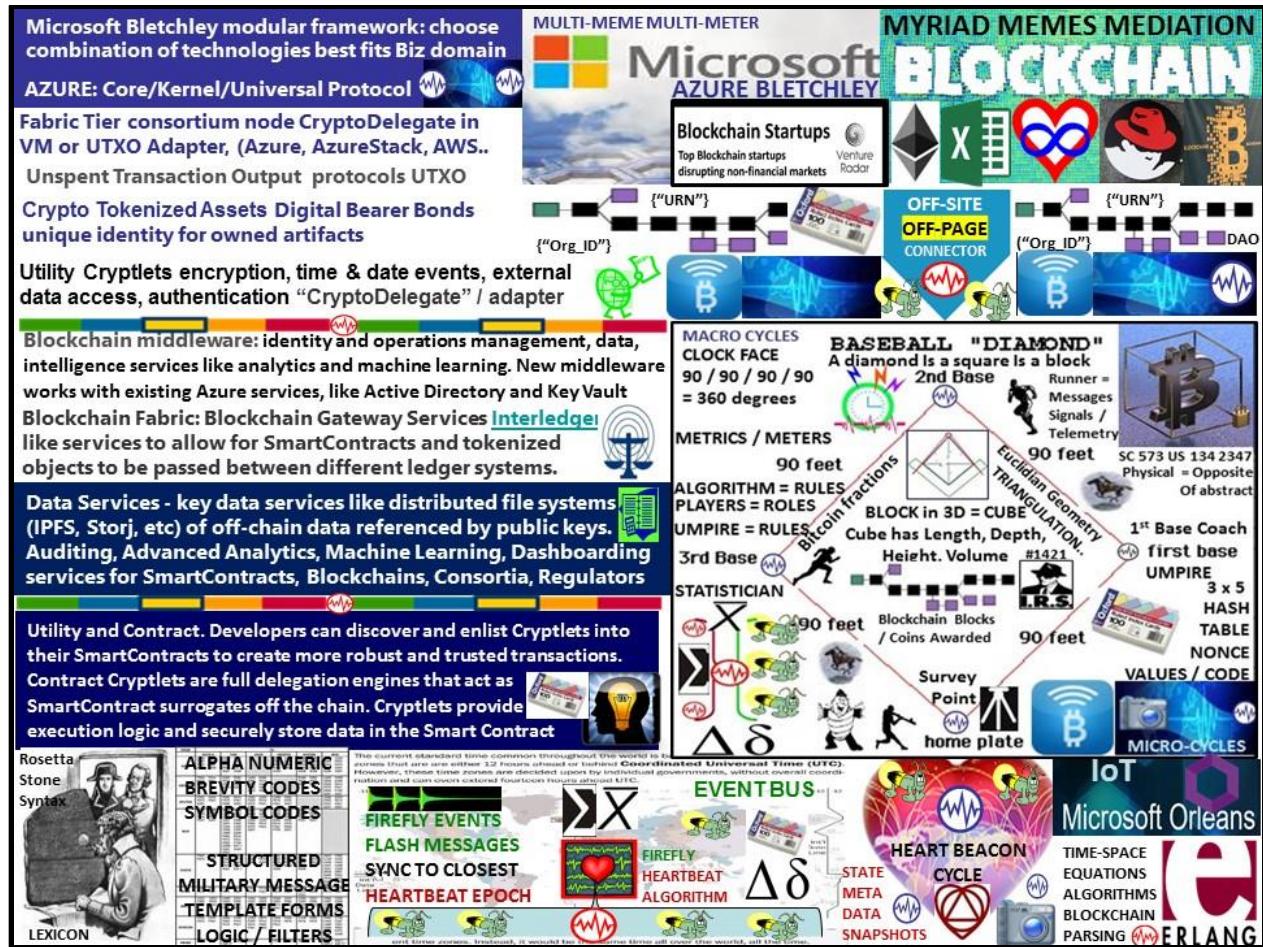


FIG 12: MICROSOFT BLETCHLEY BLOCKCHAIN AS A SERVICE BAAS / HEART BEACON CYCLE [LINK](#)

Quote from @DCCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block. A baseball tournament is played on baseball diamonds are physical and tangible -- in every town in America. The opposite of abstract is physical.

US Supreme Court Alice Corp V CLS Bank: "claims ineligible for patent protection under 35 U. S. C. §101 "directed to an abstract idea" ALICE CORP v CLS BANK <http://1.usa.gov/1V91pQe> [LINK](#)

Patent application 13,573,002 is described using a baseball league tournament. [LINK](#)

<http://slideshare.net/StevenMcGee2/13573002-the-heart-beacon-cycle-patent-application>



Figure 13: Bitcoin Blockchain multi-meme multi-meter [LINK](http://sawconcepts.com/index/id45.html): <http://sawconcepts.com/index/id45.html>

Bitcoin Blockchain metaphor, memes V SC Alice Corp V CLS bank abstract idea rule "claims may not be directed towards an abstract idea" <http://sawconcepts.com/index/id45.html>

Quote from @DCCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block.

A service based on a method to valuate Bitcoin types among a variety of metaphors / memes is needed. A baseball tournament metaphor is a simple method to describe metrics, meters and survey methods accounting for the Internal Revenue Service Bitcoin as property stance. A coin derived from currency -commodity price indexes "World Coin"

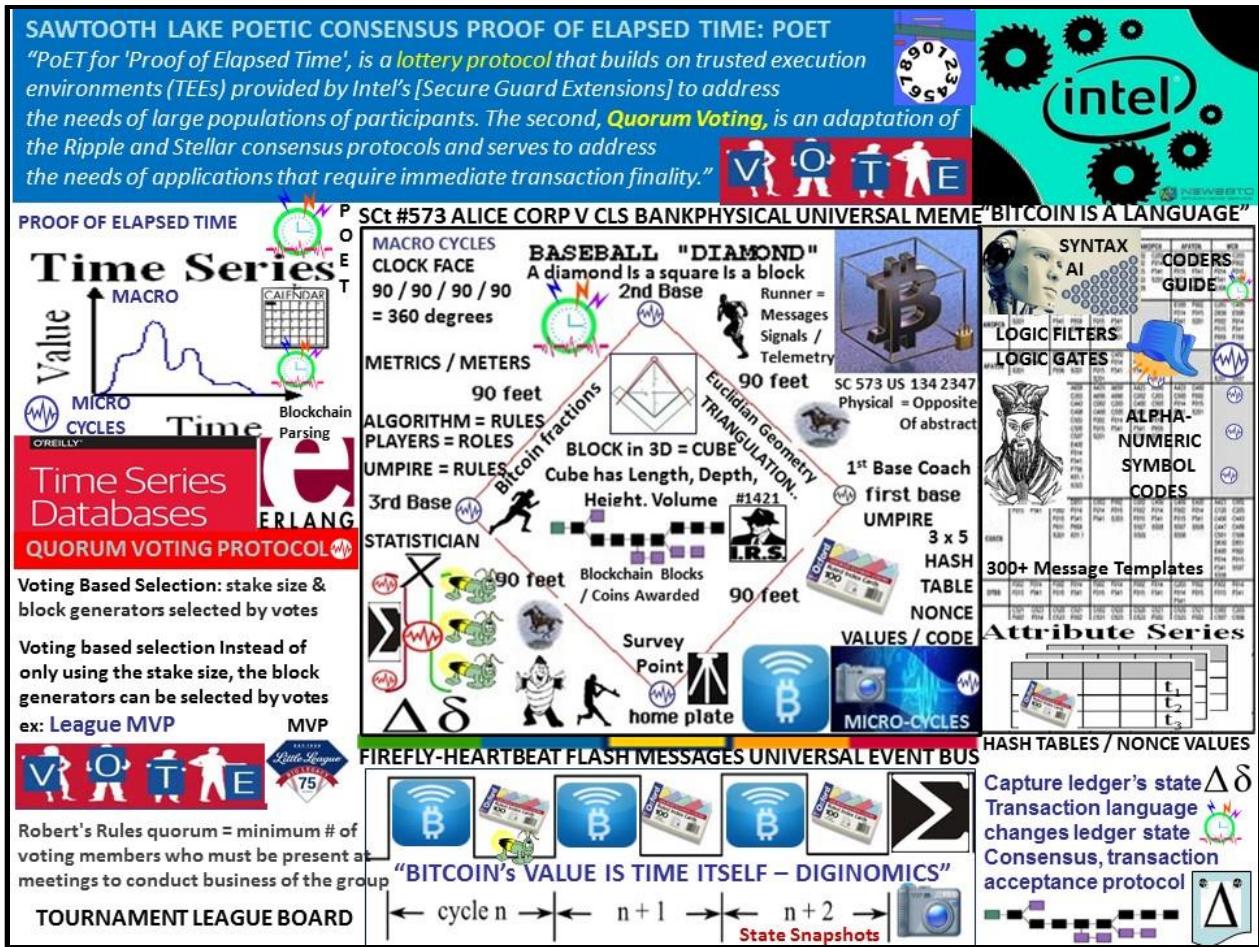


Figure 14 Bitcoin Blockchain PROOF OF ELAPSED TIME POET / QUORUM VOTING INTEL

Web Page: <http://sawconcepts.com/index/id49.html>

Quote from @DCCCertified @InsideBitcoins "Build mental models that help people wrap their heads around Bitcoin w/o having to understand it". A baseball diamond is a square, is a block. A block is awarded using age (time) or vectors (time / direction / velocity) or voting (tournament league board). A baseball tournament is played on baseball diamonds that are as physical and tangible as it gets -- in every town in America.

US Supreme Court Ruling Alice Corp V CLS Bank: "claims ineligible for patent protection under 35 U. S. C. §101 "directed to an abstract idea" ALICE CORP v CLS BANK <http://1.usa.gov/1V91pQe> [LINK](#)

The Heart Beacon Cycle patent application 13,573,002 is described using a baseball league tournament. A land use meme and internet survey techniques to define geo-spatial temporal areas in time – space will be helpful in determining the percentage of a coin bought or sold and who, where, when, how much, of a Bitcoin was transacted in context with I.R.S memo 1421 on Bitcoin that deems it property when purchased by a client.

Reference: Patent application # 13,573,002 Heart Beacon Cycle Time - Space Meter:
[LINK](http://www.slideshare.net/StevenMcGee2/13573002-the-heart-beacon-cycle-patent-application) <http://www.slideshare.net/StevenMcGee2/13573002-the-heart-beacon-cycle-patent-application>



FIG 15: ECOLOGICALLY RESPONSIBLE, SUSTAINABLE ECONOMICS ON THE BITCOIN BLOCKCHAIN

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Imagine if #IoT, #Blockchain Service Level Agreements SLA incentivized Eco friendly transactions leveraging bitcoin's micro payment function supporting the TERRA Trade Reference Currency TRC by economist Lietaer? For example, closer = cheaper, closer = less fuel ? Thomas Edison and Henry Ford proposed a currency based on a commodity basket index circa 1921. Now there is Bitcoin programmable money and the internet's heartbeat, heartbeat messages. [LINK:](https://www.supermoney.com/2014/06/thomas-edisons-view-money/) <https://www.supermoney.com/2014/06/thomas-edisons-view-money/>

Project: form trade federations of autonomous communities, states / sovereign nations following a procedural template checklist promoting synchronization among geo-spatially dispersed groups. Federated groups follow a procedural template guiding group activities across time - space to achieve synergy, synchronicity and inter community cooperation where activities are orchestrated from grassroots to capitals, from micro to macro economic cycles. Satoshi Nakamoto: "#Bitcoin is intended to be paired with a market place" "the blockchain stores references to market indexes" [LINK](http://sawconcepts.com/index/id36.html) <http://sawconcepts.com/index/id36.html>



THE HEARTBEAT CYCLE TIME – SPACE METER APPLIQUE' OVERLAY USPTO 13/573,002



SIMPLE ALWAYS WINS – STANDING ON THE SHOULDERS OF GIANTS