



(51) International Patent Classification:

G06Q 30/06 (2012.01)

(21) International Application Number:

PCT/US2019/048214

(22) International Filing Date:

26 August 2019 (26.08.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/689,328 25 June 2018 (25.06.2018) US

(71) Applicant: INTELLECTUAL PROPERTY COIN GROUP, INC. [—/US]; 200 W. Madison Street, Suite 3700, Chicago, Illinois 60606 (US).

(72) Inventors: MALACKOWSKI, James E.; 200 W. Madison Street, Suite 3700, Chicago, Illinois 60606 (US). COHEN, Jason; 200 W. Madison Street, Suite 3700, Chicago, Illinois 60606 (US). FALVEY, James M.; 200 W. Madison Street, Suite 3700, Chicago, Illinois 60606 (US).

(74) Agent: RICHMAN, Merle; PO Box 3333, La Jolla, California 92037 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report (Rule 48.2(g))
- the filing date of the international application is within two months from the date of expiration of the priority period (Rule 26bis.3)

(54) Title: SYSTEM AND METHOD FOR PROVIDING AN INTEGRATED LIQUIDITY ENHANCEMENT SYSTEM AND SECURE MARKETPLACE FOR CREATING AND TRADING PURCHASER SPECIFIC INTANGIBLE ASSET DERIVATIVES

(57) Abstract: A system and method for providing an integrated liquidity enhancement system that may be coupled with a secure marketplace for creating and trading purchaser specific derivatives or trading assets that comprise the intangible assets of companies or other entities and derivative financial contracts based on such intangible assets.



SYSTEM AND METHOD FOR PROVIDING AN INTEGRATED
LIQUIDITY ENHANCEMENT SYSTEM AND SECURE MARKETPLACE
FOR CREATING AND TRADING PURCHASER SPECIFIC INTANGIBLE
ASSET DERIVATIVES

Statement Regarding Federally Sponsored Research or Development

[0001] Not applicable.

The Names Or Parties to a Joint Research Agreement

[0002] Not applicable.

Incorporation By Reference Of Material Submitted on a Compact Disc

[0003] Not applicable.

Copyright Notice

[0004] A portion of the disclosure of this patent document including any priority documents contains material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyright rights whatsoever.

Technical Field

[0005] The present invention relates generally to an integrated liquidity enhancement system that may be coupled with a secure marketplace for creating and trading purchaser specific derivatives or trading assets that may be comprised of the intangible assets of companies or other entities and derivative financial contracts based on such intangible assets.

[0006] The present invention further relates to a method for providing integrated liquidity for the creation, purchase, sale and trading of purchaser specific derivatives or trading assets that may be comprised of the intangible

assets of companies or other entities and derivative financial contracts based on such intangible assets.

[0007] The present invention relates to a liquidity enhancement that may serve as a security and provides a negotiable coin with security attributes (eg. Dividends, asset backed, in whole or in part, convertible, etc.).

[0008] The present invention further relates to a system and method for generating, creating and using a liquidity enhancement that may serve as a security and provides a negotiable crypto coin/ crypto security as a separate asset class with security attributes.

Background Information

[0009] In traditional approaches to asset purchase, sale and management, assets are typically held by entities in a custodial manner. This creates a risk to the buyer, as the buyer's assets are subject to any errors or improprieties by the entities in custody of the assets, such as fraud, forged data, deleted data, and so forth. An enormous legal and regulatory structure exists to prevent, detect, and dissuade such errors by setting forth processes and rules for record keeping of company data, such as documents, emails, transactions, contracts, etc., and setting forth specific disclosure and fiduciary requirements.

[0010] Financial institutions are also subject to frequent audits designed to ensure those records and processes accurately represent the firm's assets, liabilities, and operations. Despite the frequent audits and the legal and regulatory structure that exists, fraud and insolvency cases occur across the entire landscape of asset management with surprising regularity. The continual failure to prevent these issues highlights the risks inherent in using third parties to manage assets. Current technologies similarly fail to prevent these issues.

[0011] Similarly, assets that are available for purchase may be limited by the specific listed or traded assets and limitations placed upon the creation of derivatives of those listed or traded assets. Previous solutions for trading assets allow users to gain exposure to thousands of available tickers (like stocks, bonds, currencies, etc.). Such applications are designed for tickers to be traded on a "single asset basis". That is, each and every swap is for a single asset (i.e. Apple for IBM, or USD for euros, etc.). However, such solutions often do not permit the trading of intangible assets or the creation of purchaser specific derivatives

of those intangible assets. Moreover, the more purchaser specific a trading asset is, the less liquidity is associated with that trading asset and the more difficult it may be to actually be able to obtain the purchaser specific trading asset.

[0012] By way of example, if a purchaser wanted to define and obtain a specific set mortgage backed securities, packaged together and then be able to secure a short position against that package, the purchaser would have to engage an investment banking house or other financial institution to create the portfolio and then have it (or someone else) take the other side of the proposed trade. Such portfolio creations are expensive and are often illiquid, thus resulting in great difficulty in properly evaluating the actual value of the portfolio.

[0013] This illiquidity and concomitant difficulty in securing a purchaser specific derivative or trading asset is more greatly felt in areas where assets that are to be part of the portfolio are intangible assets comprised of multiple sub-assets, such as patents which have multiple claims. Each claim is technically a sub-asset inasmuch as each claim defines a particular asset which the patent owner has the exclusive right to make, use or sell.

[0014] The use of financial institutions to create, trade, be counterparties to and otherwise be the primary custodians for securities and other traded assets, and specifically purchaser specific derivative or trading assets can be obviated by embodiments of the present invention in its use of blockchain technology. Also, the use of financial institutions as counterparties to contracts which they create sets up an inherent lack of liquidity, potential conflicts of interest for the financial institution and a lack of efficiency and transparency.

[0015] Blockchain technology can reduce or eliminate the risks in asset management. Blockchain technologies depend on the existence of various networks such as the Internet. and allow users to exchange assets such as digital currency using a decentralized verification system implemented and deployed over multiple servers. The process for buying, securing/storing and vetting blockchain assets has many technical steps and challenges. For example, any investor who wants to build a portfolio of blockchain assets should (1) conduct in-depth research and analysis into which blockchain assets to buy, (2) research and register at multiple asset exchanges to purchase blockchain assets, (3) securely generate and store the private keys for each blockchain asset the

investor wants to purchase, and (4) manually buy or sell assets when they want to change the composition of the portfolio.

[0016] The Ethereum based blockchain system, by way of example, can be used for blockchain assets and cryptocurrencies. However, there is still a need to create sufficient liquidity within the overall system to permit creation and trading of purchaser specific derivative or trading assets and ensure that the valuations across the system are standardized against a known value.

Traditionally, assets are marked to market against similar or identical assets that are traded and are marked to market in U.S. dollars or other currencies that are relatively stable and provide a known value for valuation purposes. Intangible assets and purchaser specific derivative or trading assets are less capable of being marked to market unless they also have a known value asset against which they can be market. This is especially true in the area of derivatives, of which purchaser specific derivative or trading assets and particularly intangible assets form a meaningful group.

[0017] Traditional derivatives contracts, such as futures and options contracts, are well known investment instruments. In a futures contract, for example, a buyer purchases the right to receive delivery of an underlying commodity or asset on a specified date in the future. Conversely, a seller agrees to deliver the commodity or asset to an agreed location on the specified date. Futures contracts originally developed in the trade of agricultural commodities. Large consumers of agricultural products seeking to secure their future supply of raw ingredients like corn, wheat and other commodities would pay in advance for guaranteed delivery in the future. Producers in turn would sell in advance to raise capital to finance the cost of production. The success of agricultural futures soon led to futures activity surrounding other commodities as well. Today futures contracts are traded on everything from pork bellies to memory chips, and from stock shares to market indices. However, futures contracts for purchaser specific derivative or trading assets and intangible assets are not similarly traded, in large part because of the lack of liquidity and related inefficiencies in seeking to create and trade them.

[0018] Over the years futures contracts have evolved from simply a means of securing future delivery of a commodity into sophisticated investment instruments. Because futures contracts establish a price for the underlying

commodity in advance of the date on which the commodity must be delivered, subsequent changes in the price of the underlying asset will inure to the benefit of one party and to the detriment of the other. If the price rises above the futures price, the seller is obligated to deliver the commodity at the lower agreed upon price. The buyer may then resell the received product at the higher market price to realize a profit. The seller in effect loses the difference between the futures contract price and the market price on the date the goods are delivered.

Conversely if the price of the underlying commodity falls below the futures price, the seller can obtain the commodity at the lower market price for delivery to the buyer while retaining the higher futures price. In this case the seller realizes a profit in the amount of the difference between the current market price on the delivery date and the futures contract price. The buyer sees an equivalent loss.

[0019] As the preceding discussion makes clear, futures contracts lend themselves to speculating in price movements of the underlying commodity. Investors may be interested in taking a "long" position in a commodity, buying today at the present futures price for delivery in the future, in anticipation that prices for the commodity will rise prior to the delivery date. Conversely investors may wish to take a short position, agreeing to deliver the commodity on the delivery date at a price established today, in anticipation of falling prices.

[0020] As futures contracts have evolved away from merely a mechanism for securing future delivery of a commodity into sophisticated investment instruments, they have become more and more abstracted from the underlying assets on which they are based. Whereas futures contracts originally required actual delivery of the underlying commodity on the specified delivery date, today's futures contracts do not necessarily require assets to change hands. Instead, futures contracts may be settled in cash. Rather than delivering the underlying asset, cash settlement requires that the difference between the market price on the delivery date and the contract price be paid by one investor to the other, depending on which direction the market price has moved. If the prevailing market price is higher than the contract price, the investor who has taken a short position in the futures contract must pay the difference between the market price on the delivery date and the contract price to the long investor. Conversely, if the market price has fallen, the long investor must pay the

difference between the contract price and the market price to the short investor in order to settle the contract.

[0021] Cash settlement allows further abstraction of futures contracts away from physical commodities or discrete units of an asset such as stock shares or intangible property right. Today futures contracts are traded on such abstract concepts as market indices and interest rates. Futures contracts on market indices are a prime example of the level of abstraction futures contracts have attained. Delivery of the underlying asset is impossible for a futures contract based on a market index such as the S&P 500. No such asset exists. However, cash settlement allows futures contracts to be written which allow investors to take positions relative to future movements in the value of an index, or other variable market indicators. A futures price is established based on a target value of the index on a specified "delivery" date. The difference between the target value price and the actual value of the index (often multiplied by a specified multiplier) is exchanged between the long and short investors in order to settle the contract. This is largely due to the liquidity that has developed around the use of futures contract where there is some touchstone against which the price can be measured and the consensus as to the validity of the contract and the pricing relative to the contract. Introducing a crypto currency liquidity enhancement which may be correlated to other crypto currencies (or to non-crypto currencies) to permit normalization and transparency in intangible asset pricing and coupling the creation, purchase and transfer of such intangible assets with a secure, verifiable and inherently valid contract mechanism is required to permit the efficient creation and sale of such intangible assets.

[0022] The value of traditional futures contracts is inherently tied to the market price or value of the underlying asset and the agreed upon settlement price. The market value of the underlying asset itself, however, may be influenced by any number of external factors. For example, the amount of rainfall in Iowa in June could affect the value of corn futures for September delivery. The latest national productivity report may have a positive or negative impact on S&P 500 futures. If the share price of a particular company reaches a certain value, it may impact the price investors are willing to pay for futures based on that company's shares. The factors that influence the value of traditional futures contracts may also have an impact on other investments and

assets. For example, if the share price of a market leader in a certain economic sector were to reach a certain value, it may signal to investors that the whole sector is poised for significant growth and may pull up the share price of other companies in the same sector. Likewise, an unexpected change in interest rates by the Federal Reserve may affect share prices broadly throughout the capital markets.

[0023] In the area of intellectual property, a decision by a court or other entity may affect the value of a patent or a portfolio by determining that certain claims are or are not anticipated, are or are not obvious, are or are not infringed, etc. The basis for the findings may pull up the value of a patent or a portfolio. Similarly, licensing of a patent, a portfolio of patents or even a claim may affect the value of that intangible asset or set of assets.

[0024] However, there is no present system or marketplace for efficiency and transparently creating futures contracts in purchaser specific derivatives or trading assets in intangible rights nor is there a current system or method for creating the necessary liquidity to permit the creation of purchaser specific derivative or trading asset or futures contracts for such assets. The current invention may be employed to overcome these deficiencies in the intellectual property marketplace.

[0025] When intellectual property investors wish to take positions based on the occurrence or non-occurrence of various contingent events that may have broad impact across any number of individual investments, they may take a number of positions in various investments that the investor believes will all be affected in the same way by the occurrence or non-occurrence of a specific event. A problem with this approach is that the individual intellectual property investments in which the investor takes a position may be influenced by factors other than the occurrence or non-occurrence of the specified event. Further, each individual intellectual property investment may be affected differently by the occurrence or non-occurrence of the specified event. Thus, the investor may not be able to fully isolate the economic impact that the occurrence or non-occurrence of a specified event may have, and directly invest in what he or she perceives to be the likely outcome of the event.

[0026] A traditional securities exchange or futures exchange is an organized marketplace for buyers and sellers of listed securities to come together

to make trades in those securities. The securities are bought and sold in a forum where price is determined through supply-demand mechanisms. The types of securities traded on a securities or futures exchange include, for example, stocks, bonds, stock options, futures, unit trusts, and other pooled investment products. Trade on a securities exchange is by members, or stock brokers, and stock and share holders. New issues of stocks and bonds are first offered to investors in a part of the securities markets referred to as the primary market, with subsequent trading occurring in the secondary market, where an investor purchases a security from another investor. Although there is generally no requirement of issuing stock or trading stock through the stock exchange, a stock exchange provides a centralized, ready market for the exchange of securities. For instance, bonds are usually traded "off exchange" or over-the-counter. The influence of technology on modern markets is reflected in the recent trend towards using electronic networks for securities trading, which may offer faster transactions at reduced costs, without the assistance of a specialist as an intermediary.

[0027] In order for companies to be listed and/or traded on a particular securities exchange, they must meet the listing and/or trading requirements of that exchange. The listing requirements, generally set by an exchange's board of governors, refer to the set of conditions imposed upon companies that want to be listed and/or traded on that exchange. Among the dozens of securities exchanges around the world, the listing requirements vary and reflect criteria such as minimum number of shares outstanding, minimum market capitalization, and minimum annual income. For example, companies must meet specific financial and liquidity requirements to have their securities listed on the NASDAQ Global Select Market.TM.. For the financial requirements, a company must meet all of the criteria under at least one of three detailed financial standards, each one mandating requirements under pre-tax earnings, cash flows, market capitalization, revenue, bid price, market makers, and corporate governance. The three specific liquidity requirements involve the number of beneficial shareholders, publicly held shares, and market value of publicly held shares. Furthermore, companies must meet requirements for continued inclusion. The New York Stock Exchange ("NYSE") has its own minimum quantitative standards of distribution and size criteria and financial criteria. To be listed on the NYSE, a company must have 2,000 holders of a unit of trading or 2,200 total

shareholders, together with an average monthly trading volume of 100,000 shares or 500 total shareholders, together with an average monthly trading volume of 1 million shares, 1.1 million outstanding public shares, and a market value of public shares being \$100 million for public companies and \$60 million for initial public offerings ("IPOs"), spin-offs, carve-outs and affiliated companies. When a company falls below any criterion, the NYSE will review the appropriateness of continued listing.

[0028] Among an individual or corporation's assets are any item(s) of monetary value or resources with economic value. Tangible assets are those of a physical form, such as machinery, factories, buildings, land, and inventory. Those assets without tangible, physical substance are termed intangible assets, which as used herein include intellectual property ("IP") assets. IP assets, as used herein, include patents, trademarks, copyrights and trade secrets, patent and trademark applications, business methodologies as well as research and development, inventions, discoveries, improvements, modifications, enhancements, technologies, methods and production/process information know-how, expertise, algorithms, compositions, data, works, concepts, designs, ideas, prototypes, writings, notes, and licenses of intellectual property. Non-IP intangible assets may include customer contact lists and goodwill, for example.

[0029] Within the last quarter century, IP has emerged as the leading asset class within corporate America. The United States economy has experienced a shift from manufacturing to services, with the traditional labor and industrial based economy rapidly transitioning to a knowledge-based economy. In 1975, more than 80% of the market value of companies within the S&P 500.RTM. consisted of tangible assets. By 2005, less than 20% of the companies' market value was composed of tangible assets. Subsequent to the evolution from a manufacturing base to a service base, the United States has entered into a phase of economic activity where value is captured primarily through IP and the proprietary position it offers. IP is shifting from a tool to protect knowledge and technology to an asset class that can provide liquidity for innovation.

[0030] Historically, IP trading has been highly inefficient and generally limited to single or infrequent private transactions. The IP marketplace includes any entity that uses knowledge assets as a competitive advantage. Among the

market players are inventors, both individual and corporate, Patent Licensing Enforcement Companies ("P-LECs"), investors, third party valuation experts, and brokers. The market has predominantly relied on the inefficient method of hand-to-hand sale or license of IP, a process that can take years for buyers and sellers. This method is discouraging and inhibits many companies from becoming actively involved in the exchange of IP.

[0031] The majority of IP is transacted by IP holding companies of Fortune 500 firms located across the United States. Since most of these firms transfer IP in privately negotiated transactions that take place in several face to face meetings, the time, energy, and money involved in transacting IP is very high. Additionally, the process of negotiating licenses for IP rights often takes place in a disorganized manner. As a result of these inefficient and infrequent transactions, the price discovery and transparency of the IP asset class is very poor. Accounting rules and procedures for reporting on the value of IP in most financial statements further obfuscate the value of IP. Generally speaking, IP is only reported on financial statements if it is acquired (as opposed to being developed internally). Further, the records of patent and trademark ownership listed by the United States Patent & Trademark Office may not always be current, and since a majority of IP transactions tend to be private, the parties and terms of IP licenses are often unknown.

[0032] A computerized intellectual property trading exchange is disclosed in U.S. Patent 7,987,142 and U.S. Patent 9,058,628. That computerized trading exchange facilitates the trading of intellectual property rights by permitting unitized intellectual property license contracts to be traded between individuals and provides a forum in which IP owners, licensees or financial investors or speculators may buy or sell IP rights through licenses. However, it does not provide the additional liquidity that is desirable to effectuate free and efficient trading in IP rights and contemplates the use of third parties to undertake the traditional investment aspects of a trading exchange, such as underwriters and investment banks. Thus, the referenced patents still require the use of an exchange to permit the transfer of the intellectual property contracts. Moreover, in the referenced inventions, the exchange guarantees and clears the transactions. In order to permit these functions, there are certain requirements imposed by the above referenced trading exchange such as requiring the

intellectual property to be assigned by the owners to a special purpose vehicle (“SPV”) controlled by the exchange. There is a need for a system and method that provides the security aspects of an exchange without there having to be a central exchange with its limitations, requirements and third parties to effectuate secure intellectual property transfers. The present invention fulfills those needs with its security, transparency, audit trails and liquidity enhancements without the need for a central exchange to effectuate the transfer of intellectual property rights.

[0033] A method of an intellectual property grouping owned by a patent entity to generate income is disclosed in U.S. Patent 8,694,419. The method includes acquiring rights in a first intellectual property asset from a seller on behalf of a patent investment entity, providing compensation to the seller in exchange for the first intellectual property asset and taking subsequent steps to grant rights based upon the acquisition of the rights in the first intellectual property asset. The methodology disclosed, while valuable and novel, does not provide the additional liquidity that is desirable to effectuate free and efficient trading in IP rights and does not contemplate a secure method, system and marketplace where intangible rights maybe created and then purchased, sold or otherwise transferred through Unit License Right Smart Contracts (“ULRs”) which represent a block chain ledger allowing patent owners to more efficiently license their IP rights, create greater transparency and provide a secondary market opportunity with clear audit trail and accounting value recognition.

[0034] Therefore, what is needed is an integrated liquidity enhancement system coupled with a secure marketplace for creating and trading the purchaser specific derivative or trading asset that comprise the intangible assets of companies or other entities and derivative financial contracts based on such intangible assets, so as to make IP transactions more efficient, transparent, and economical, and to make IP a more meaningful and valuable asset class. What is also needed is a method, system and marketplace where the intangible assets may be created and then purchased, sold or otherwise transferred through ULRs which represent a blockchain ledger allowing patent owners to more efficiently license their IP rights, create greater transparency and provide a secondary market opportunity with clear audit trail and accounting value recognition.

Brief Description of the Drawings

[0035] FIG. 1 is a block diagram of an exemplary system and/or computing device according to various embodiments.

Detailed Description

[0036] An integrated liquidity enhancement system coupled with a secure marketplace for creating and trading the purchaser specific derivative or trading asset that comprise the intangible assets of companies or other entities and derivative financial contracts based on such intangible assets.

[0037] The integrated liquidity enhancement system coupled with a secure marketplace may be employed for creating and trading purchaser specific derivative intangible assets of entities as defined by the purchaser or trading assets that comprise traditional securities of listed/traded entities configured and selected as a specific derivative or trading asset as defined by the purchaser. The purchaser specific derivative or trading assets may be traded in the secure marketplace, thus creating a secondary market opportunity while allowing for greater efficiency, transparency, audit trail and value recognition for accounting purposes.

[0038] The integrated liquidity enhancement system may include the creation and use of tokens, such as IP Coins, as a proprietary cryptocurrency, or may be any one of a number of other digital assets, including digital math-based assets, such as bitcoins, Namecoins, Litecoins, PPCoins, Tonal bitcoins, IxCoins, Devcoins, Freicoins, I0coins, Terracoins, Liquidcoins, BBQcoins, BitBars, PhenixCoins, Ripple, Dogecoins, Mastercoins, BlackCoins, Ether, Nxt, BitShares-PTS, Quark, Primecoin, Feathercoin, 19 Peercoin, Darkcoins, XC, MaidSafeCoins, Vertcoins, Qoras, Zetacoins, Megacoins, YbCoins, Novacoins, Moneros, Infinitecoins, MaxCoins, WorldCoins, Billioncoins, Anoncoins Colored Coins, or Counterparty, to name a few. For purposes of discussion, without limiting the scope of the invention, embodiments involving IP Coins may be discussed to illustrate the present invention. The disclosure can encompass other forms of digital assets, digital math-based assets, peer-to-peer electronic cash system, digital currency, synthetic currency, or digital cryptocurrency.

[0039] As a further aspect of the instant invention, the IP Coins may be loaned to owners of intangible assets or may be otherwise made available to persons who wish to participate in the creating and trading of purchaser specific derivatives and intangible assets of entities as defined by the purchaser or trading

assets that comprise traditional securities of listed/traded entities configured and selected as a specific derivative or trading asset as defined by the purchaser.

[0040] As yet another aspect of the instant invention, the intangible assets may be created and then purchased, sold or otherwise transferred through ULRs which represent a blockchain ledger allowing patent owners to more efficiently license their IP rights, create greater transparency and provide a secondary market opportunity with clear audit trail and accounting value recognition. ULRs may be a part of an Ethereum based blockchain platform or such other blockchain platform as may provide the most efficient transactional marketplace for the ULRs. Ethereum is an open-source, public, blockchain-based distributed computing platform and 20 operating system featuring smart contract (scripting) functionality. It supports a modified version of Nakamoto consensus via transaction based state transitions.

[0041] Blockchain technology (sometimes simply referred to as blockchain) is a technology that has been used in digital currency implementations. It is described in a 2008 article by Satoshi Nakamoto, called "Bitcoin: A Peer-to-Peer Electronic Cash System," the entire contents of which are hereby incorporated by reference. The blockchain is a data structure that stores a list of transactions and can be thought of as a distributed electronic ledger that records transactions between source identifier(s) and destination identifier(s). The transactions are bundled into blocks and every block (except for the first block) refers back to or is linked to a prior block in the chain. Computer nodes maintain the blockchain and cryptographically validate each new block and thus the transactions contained in the corresponding block. This validation process includes solving a computationally difficult problem that is also easy to verify and is sometimes called a "proof-of-work."

[0042] The integrity (e.g., confidence that a previously recorded transaction has not been modified) of the entire blockchain is maintained because each block refers to or includes a cryptographic hash value of the prior block. Accordingly, once a block refers to a prior block, it becomes difficult to modify or tamper with the data (e.g., the transactions) contained therein. This is because even a small modification to the data will affect the hash value of the entire block. Each additional block increases the difficulty of tampering with the

contents of an earlier block. Thus, even though the contents of a blockchain may be available for all to see, they become practically immutable.

[0043] The identifiers used for blockchain transactions are created through cryptography such as, for example, public key cryptography. For example, a user may create a destination identifier based on a private key. The relationship between the private key and the destination identifier can later be used to provide "proof" that the user is associated with the output from that created transaction. In other words, the user can now create another transaction to "spend" the contents of the prior transaction. Further, as the relationship between the destination identifier and the corresponding private key is only known by the user the user has some amount of anonymity as they can create many different destination identifiers (which are only linked through the private key). Accordingly, a user's total association with multiple transactions included in the blockchain may be hidden from other users. While the details of a transaction may be publicly available on the distributed ledger, the underlying participants to those transactions may be hidden because the identifiers are linked to private keys known only to the corresponding participants.

[0044] Disclosed herein are technologies and applications for blockchain-based smart contract driven intangible asset creation, purchase, sale or transfer through ULRs which represent a blockchain ledger allowing patent owners to more efficiently license their IP rights, create greater transparency and provide a secondary market opportunity with clear audit trail and accounting value recognition and management. The inventions disclosed herein allow users to: (1) Build a portfolio of intangible assets that may be created and then purchased, sold or otherwise transferred through ULRs from a user-friendly interface, (2) Create and purchase an entire portfolio of intangible assets in a single transaction (i.e., 22 rather than a single intangible asset basis transaction, transactions can involve a plurality of intangible assets being acquired in a single step), (3) Secure the entire portfolio under a single private key, which only the investor controls, from beginning to end (i.e. no custodial or counterparty risk), (4) Manage and maintain multiple blockchain intangible assets and purchaser designated and derived intangible asset types without storing and managing a different wallet for each type of the blockchain assets, (5) Rebalance the

portfolio as desired through a single signed transaction, and (6) Store, trade, and manage an entire group of intangible assets using a single private key.

[0045] The approach disclosed also allows users to obtain IP Coins, which constitute crypto currency, and use of the crypto currency to secure additional patent rights. The invention unifies the use of a system and method for providing digital asset, including digital math-based asset, liquidity enhancements to permit the purchasing, licensing and trading of intellectual property rights through a digital, decentralized asset ledger system and marketplace for trading rights derived from intangible assets and particularly intellectual property assets. The IP Coins may be loaned to patent owners based upon the value of their underlying patents. Thus, by way of example, a patent owner may have a portfolio of patents and it may receive an amount of IP coins which is a percentage of the value of the underlying patent portfolio. The IP coins may either be loaned to the patent owner or may given to the patent owner as part of a purchase price for a portion of the rights or future income stream from the patent portfolio. Additional IP coins maybe made available to nonpatent owners by way of sale or loan. By providing the IP coins, there is liquidity created within the system to permit the efficient trading of the IP rights represented by the ULRs.

[0046] Blockchain technologies provide significant improvements over traditional IP asset management and data recording procedures. Blockchain represent an evolution in web and database technology. Leveraging blockchain technology enables new services and service improvements not previously feasible or even possible. For example, the approaches herein can implement blockchain technologies to provide a new service and technical environment for IP portfolio creation, transfer, licensing and management with reduced/eliminated infinite use right risk which is inherent in intangible asset licensing.

[0047] The approaches set forth herein can provide secure and efficient technologies and procedures for managing a portfolio of blockchain IP assets and implementing various intangible asset management functionalities such as portfolio rebalancing. The approaches herein can implement a distributed architecture for hosting a blockchain and distributed information which together can enhance intangible asset and portfolio information, intangible asset and

information security, and user control and flexibility. The system outlined herein can also reduce costs inasmuch as the provenance of the intangible asset rights can be immediately tracked and established, thus eliminating long and costly assignment searches and the possibility of the existence of non-recorded third party rights.

[0048] With this technology, users can own and manage portfolios of blockchain (or any digital) intangible assets using the blockchain, smart contracts, IP Coins and related patent backed debt structures. Furthermore, with this technology purchasers 24 of licenses can benefit from additional tracking and publication of the issuance and use of ULRs which are purchased with either IP Coins, Other crypto currencies or conventional currencies and can also benefit from the record creation and maintenance of the system.

[0049] In the context of blockchains and cryptocurrencies, the ULRs are smart contracts and are: (1) pre-written logic (computer code); (2) stored and replicated on a distributed storage platform (e.g. a blockchain); (3) executed/run by a network of computers (usually the same ones running the blockchain); and (4) can result in ledger updates (cryptocurrency payments, intangible asset creation and transfer, etc.).

[0050] In other words, smart contracts are programs that execute "if this happens then do that" that are run on, and are verified by, many computers to ensure trustworthiness. If blockchains provide distributed trustworthy storage, then smart contracts provide distributed trustworthy calculations. In other words, smart contracts are programs that execute "if this happens then do that" that are run on, and are verified by, many computers to ensure trustworthiness. If blockchains provide distributed trustworthy storage, then smart contracts provide distributed trustworthy calculations.

[0051] The ULRs can apply to any intangible asset derivatives and their concomitant contracts and assignments, buying or selling of such purchaser created and defined derivatives. Indeed, the procedures, components and systems disclosed herein could apply to any kind of contract. Any kind of blockchain technology can also be implemented or combined with the concepts disclosed herein. In fact, the 25 technologies disclosed herein are blockchain agnostic and can be implemented with any future blockchain technologies.

[0052] The system or method further includes receiving, at the ULR, an indication that the purchaser wants to create and trade a purchaser specific derivative or trading asset that comprise the intangible assets of companies or other entities and derivative financial contracts based on such intangible assets. In short, the purchaser wants to close the contract. This indication can be associated with a signed message from a purchaser private key. The system or method can also include settling the arrangement via the ULR based on a current value of the portfolio, which can be calculated based on pricing data received from a trusted valuation entity.

[0053] The smart contract can be the same contract, existing in the same place on the blockchain but with a new "state". The new state reflects the new composition of the portfolio which is recorded in the blockchain. The blockchain is the transparent and relatively immutable record of state changes which the contract undergoes. The system writes a new entry in the blockchain that reflects the new portfolio composition. In another aspect, the system can create a new contract but with different parameters (asset allocations/additional claims/additional patents/other intangible assets). The old contract can be discarded, deleted or made inactive.

[0054] The approaches disclosed herein provide significant advantages of transparency and auditability. In the present disclosure, "the contract is the code," which means that using blockchain technology and URLs, everything is transparent and secured by cryptography. Individuals cannot forge, erase, or add data inappropriately. The system provides complete transparency in view of who owns the intangible assets and their providence over time. This new system provides a new infrastructure with greater cyber security and overall security, and eliminates the need to trust others and rely on third parties to be honest.

[0055] The problems outlined above, among others, are addressed by the concepts disclosed herein. For example, the approaches disclosed herein can implement a blockchain-based smart contract paired with a data feed in which the performance and settlement of the purchase or subsequent transfer arrangement occurs autonomously and without risk to either party. Both parties, when they enter in the contract, know with mathematical certainty that the other side does not need to perform anything. With the approaches herein, there is no counterparty risk and no need for a clearing house. The blockchain-based ULR

creates an auditable, transparent trail and the code executes the intent of the parties.

[0056] The use of the smart contract herein reduces the likelihood of failure to perform, eliminates nonperformance risks, and reduces the cost of entering, managing, and executing a swap agreement. The use of the smart contract herein can also reduce the cost of dealing with such failures to perform and eliminates the need for a central clearing house. In the IP world, there are licenses which can be an agreement directly between the two parties to purchase or sell certain rights. In that case, the parties have counterparty risk should one or the other party not fulfill their obligations, do not have the purported rights, have already licensed certain rights to others in related fields, etc. In the case where both parties employ the services of a trusted third party, there is always a risk that the trusted third party may not manage and enforce the license. The approaches herein eliminate the risks in both scenarios above, as well as their associated costs. Again, in the disclosed solution, there is no need for a trusted third party, and in the direct licensing scenario, both parties do not have trust each other thus eliminating counterparty risk.

Accounts and Transaction Security

[0057] Digital assets may be associated with a digital asset account, which may be identified by a digital asset address. A digital asset account can comprise at least one public key and at least one private key, e.g., based on a cryptographic protocol associated with the particular digital asset system. One or more digital asset accounts may be accessed and/or stored using a digital wallet, and the accounts may be accessed through the wallet using the keys corresponding to the account.

Public Keys

[0058] A digital asset account identifier and/or a digital wallet identifier may comprise a public key and/or a public address. Such a digital asset account identifier may be used to identify an account in transactions, e.g., by listing the digital asset account identifier on a decentralized electronic ledger (e.g., in association with one or more digital asset transactions), by specifying the digital asset account identifier as an origin account identifier, and/or by specifying the digital asset account identifier as a destination account identifier, to name a few. The systems and methods described herein involving public keys and/or public

addresses are not intended to exclude one or the other and are instead intended generally to refer to 28 digital asset account identifiers, as may be used for other digital math-based asset. A public key may be a key (e.g., a sequence, such as a binary sequence or an alphanumeric sequence) that can be publicly revealed while maintaining security, as the public key alone cannot decrypt or access a corresponding account. A public address may be a version of a public key. In embodiments, a public key may be generated from a private key, e.g., using a cryptographic protocol, such as the Elliptic Curve Digital Signature Algorithm ("ECDSA").

[0059] By way of example, for bitcoins, a public key may be a 512-bit key, which may be converted to a 160-bit key using a hash, such as the SHA-256 and/or RIPEMD-160 hash algorithms. The 160-bit key may be encoded from binary to text, e.g., using Base58 encoding, to produce a public address comprising non-binary text (e.g., an alphanumeric sequence). A public address may also comprise a version (e.g., a shortened yet not truncated version) of a public key, which may be derived from the public key via hashing or other encoding. In embodiments, a public address for a digital wallet may comprise human-readable strings of numbers and letters around 34 characters in length, beginning with the digit 1 or 3, as in the example of 175tWpb8K1S7NmH4Zx6rewF9WQrcZv245W. The matching private key may be stored in a digital wallet or mobile device and protected by a password or other techniques and/or devices for providing authentication.

[0060] In other digital asset networks, other nomenclature mechanisms may be used, such as a human-readable string of numbers and letters around 34 characters in length, beginning with the letter L for Litecoins or M or N for Namecoins or around 44 characters in length, beginning with the letter P for PPCoins, to name a few. IP Coins may use a human-readable string of numbers and letters around 40 characters in length, beginning with the letter I.

Private Keys

[0061] A private key in the context of a digital math-based asset, such as bitcoins, may be a sequence such as a number that allows the digital math-based asset, e.g., bitcoins, to be transferred or spent. In embodiments, a private key may be kept secret to help protect against unauthorized transactions. In a digital asset system, a private key may correspond to a digital asset account, which may

also have a public key or other digital asset account identifier. While the public key may be derived from the private key, the reverse may not be true.

[0062] A digital asset account, such as a multi-signature account, may require a plurality of private keys to access it. In embodiments, any number of private keys may be required. An account creator may specify the number of required keys (e.g., 2, 3, 5, to name a few) when generating a new account. More keys may be generated than are required to access and/or use an account. For example, 5 keys may be generated, and any combination of 3 of the 5 keys may be sufficient to access a digital asset account. Such an account setup can allow for additional storage and security options, such as backup keys and multi-signature transaction approval, as described herein.

[0063] Because a private key provides authorization to transfer or spend digital assets such as IP Coins, security of the private key can be important. Private keys can be stored via electronic computer files, but they may also be short enough that they can be printed or otherwise written on paper or other media.

[0064] In embodiments, a private key can be made available to a program or service that allows entry or importing of private keys in order to process a transaction from an account associated with the corresponding public key. Some wallets can allow the private key to be imported without generating any transactions while other wallets or services may require that the private key be swept. When a private key is swept, a transaction is automatically broadcast so that the entire balance held by the private key is sent or transferred to another address in the wallet and/or securely controlled by the service in question.

[0065] The financial products traded may include products that provide an interest in an intangible asset, including but not limited to intellectual property assets, such as an outright sale of a patent, copyright, or trademark or a sale of license rights to such intellectual property, as well as products that do not provide an interest in the intangible asset. In one embodiment, derivative financial contracts based on underlying intangible asset(s) are traded, allowing investors a liquid investment tool to hedge risk, gaining financial exposure to the intangible assets underlying corporate valuations, as well as allowing financial exposure to breakthroughs or market trends in specific technology areas or industry sectors.

[0066] In this respect, the present technologies provide a new computing infrastructure, environment, and procedure for managing digital assets, creating purchaser defined intangible asset derivatives and multi-asset portfolios, with significant improvements over existing technologies and procedures, including technologies and procedures for data storage, security, management, communication, efficiency, etc. The new computing infrastructure, environment, and procedure provide distributed data storage, enhancement, security, control, processing, verification, etc., and enhance the information and functionality of data and systems across the distributed environment. The new process disclosed herein allows value creators (the patent owners, licensees, patent enforcement entities or intangible asset traders) to connect directly without numerous intermediaries like clearing houses, custodians, banks, etc. This is accomplished at least partly by collapsing the infrastructure costs of such intermediaries onto the blockchain and associated technologies (smart contracts, infrastructure, modern cryptography, etc.).

[0067] The present invention further provides for previously unrealized benefits and synergy in the use of ULRs and IP Coins to acquire and trade intangible property rights. Previously, contracts were generally traded in currencies where there was a price paid for the rights and there was no benefit associated with the currency that was used to purchase those rights. Thus, if a contract was denominated and traded in U.S. dollars, there was no benefit obtained if a purchaser sought to use yen or Euros to acquire the contract. In contradistinction, since the IP Coin may be tied to the ULRs when the rights are created, there is a synergy between the IP Coins and the ULRs which permits incentive structures to be created if IP Coins are used to acquire or trade the ULRs. This can lead to traders seeking to acquire the IP Coins and thus provides even greater liquidity by increasing the number of IP Coins in circulation.

[0068] While blockchain technologies may generally be designed for trading single assets, the technologies are generally incapable of performing multi-asset transactions or managing portfolios of different types of assets, such as blockchain assets and non-blockchain assets (e.g., real-world assets). The technologies and system disclosed herein address these limitations and provide various other improvements to blockchain and non-blockchain technologies, including flexibility, security, and performance improvements. For example, the

technologies provide a multi-asset solution which allows portfolios to be built with different types of assets and enables swaps of entire portfolios as opposed to merely single asset transactions.

[0069] FIG. 1 is a block diagram of an exemplary system and/or computing device 30 according to various embodiments. An exemplary system and/or computing device 30 may include a processing unit (CPU or processor) 32 and a system bus 33 that couples various system components including the system memory such as read only memory (ROM) 37 and random-access memory (RAM) 34 to the processor. The system can include a cache of high-speed memory connected directly with, in close proximity to, or integrated as part of the processor. The system copies data from the memory and/or the storage device to the cache for quick access by the processor. In this way, the cache provides a performance boost that avoids processor delays while waiting for data. These and other modules can control or be configured to control the processor to perform various operations or actions. Other system memory may be available for use as well. The memory can include multiple different types of memory with different performance characteristics.

[0070] It can be appreciated that the disclosure may operate on a computing device with more than one processor or on a group or cluster of computing devices networked together to provide greater processing capability. The processor can include any general-purpose processor and one or more hardware module or software modules, stored in a storage device and configured to control the processor as well as a special-purpose processor where software instructions are incorporated into the processor. The processor may be a self-contained computing system, containing multiple cores or processors, a bus, memory controller, cache, etc. A multi-core processor may be symmetric or asymmetric. The processor can include multiple processors, such as a system having multiple, physically separate processors in different sockets, or a system having multiple processor cores on a single physical chip.

[0071] Similarly, the processor can include multiple distributed processors located in multiple separate computing devices, but working together such as via a communications network. Multiple processors or processor cores can share resources such as memory or the cache, or can operate using independent resources. The processor can include one or more of a state

machine, an application specific integrated circuit (ASIC), or a programmable gate array (PGA) including a field PGA.

[0072] The system bus may be any of several types of bus structures including a memory bus or memory controller, a peripheral bus, and a local bus using any of a variety of bus architectures. A basic input/output system (BIOS) stored in ROM or the like, may provide the basic routine that helps to transfer information between elements within the computing device such as during start-up. The computing device further includes storage devices or computer-readable storage media such as a hard disk drive, a magnetic disk drive, an optical disk drive, tape drive, solid-state drive, RAM drive, removable storage devices, a redundant array of inexpensive disks (RAID), hybrid storage device, or the like. The storage device is connected to the system bus by a drive interface. The drives and the associated computer readable storage devices provide nonvolatile storage of computer-readable instructions, data structures, program modules and other data for the computing device.

[0073] A hardware module 44 that performs a particular function includes the software component stored in a tangible computer-readable storage device in connection with the necessary hardware components, such as the processor, bus, an output device such as a display 47, and so forth, to carry out a particular function. The system can also use a processor and computer-readable storage device to store instructions which, when executed by the processor, cause the processor to perform operations, a method or other specific actions. The basic components and appropriate variations can be modified depending on the type of device, such as whether the computing device is a small, handheld computing device, a desktop computer, or a computer server. When the processor executes instructions to perform "operations", the processor can perform the operations directly and/or facilitate, direct, or cooperate with another device or component to perform the operations.

[0074] Although the storage device may be a hard disk, other types of computer readable storage devices which can store data that are accessible by a computer, such as magnetic cassettes, flash memory cards, digital versatile disks (DVDs), cartridges, random access memories (RAMs), read only memory (ROM), a cable containing a bit stream and the like, may also be used in the operating environment. Tangible computer-readable storage media, computer-

readable storage devices, computer-readable storage media, and computer-readable memory devices, expressly exclude media such as transitory waves, energy, carrier signals, electromagnetic waves, and signals per se.

[0075] To enable user interaction with the computing device, an input device represents any number of input mechanisms, such as a microphone for speech, a touch-sensitive screen for gesture or graphical input, keyboard, mouse, motion input, speech and so forth 56. An output device can also be one or more of a number of output mechanisms known to those of skill in the art. In some instances, multimodal systems enable a user to provide multiple types of input to communicate with the computing device 47, 45. The communications interface generally governs and manages the user input and system output 44. There is no restriction on operating on any particular hardware arrangement and therefore the basic hardware depicted may easily be substituted for improved hardware or firmware arrangements as they are developed.

[0076] The processor function may be provided through the use of either shared or dedicated hardware, including, but not limited to, hardware capable of executing software and hardware, such as a processor that is purpose-built to operate as an equivalent to software executing on a general-purpose processor. The functions of one or more processors can be provided by a single shared processor or multiple processors. (Use of the term "processor" should not be construed to refer exclusively to hardware capable of executing software.) Very large-scale integration (VLSI) hardware embodiments, as well as custom VLSI circuitry in combination with a general-purpose DSP circuit, may also be provided.

[0077] The logical operations of the various embodiments are implemented as: (1) a sequence of computer implemented steps, operations, or procedures running on a programmable circuit within a general use computer; (2) a sequence of computer implemented steps, operations, or procedures running on a specific-use programmable circuit; and/or (3) interconnected machine modules or program engines within the programmable circuits. The system can practice all or part of the recited methods, can be a part of the recited systems, and/or can operate according to instructions in the recited tangible computer-readable storage devices. Such logical operations can be implemented

as modules configured to control the processor to perform particular functions according to the programming of the module.

[0078] One or more parts of the computing device, up to and including the entire computing device, can be virtualized. For example, a virtual processor can be a software object that executes according to a particular instruction set, even when a physical processor of the same type as the virtual processor is unavailable. A virtualization layer or a virtual "host" can enable virtualized components of one or more different computing devices or device types by translating virtualized operations to actual operations. Ultimately however, virtualized hardware of every type is implemented or executed by some underlying physical hardware. Thus, a virtualization compute layer can operate on top of a physical compute layer. The virtualization compute layer can include one or more of a virtual machine, an overlay network, a hypervisor, virtual switching, and any other virtualization application.

[0079] The processor can include all types of processors, including a virtual processor. However, when referring to a virtual processor, the processor includes the software components associated with executing the virtual processor in a virtualization layer and underlying hardware necessary to execute the virtualization layer. The system can include a physical or virtual processor that receive instructions stored in a computer-readable storage device, which cause the processor to perform certain operations. When referring to a virtual processor, the system also includes the underlying physical hardware executing the virtual processor.

[0080] The modules may include hardware circuitry, single or multi-processor circuits, memory circuits, software program modules and objects, firmware, and combinations thereof, as desired by the architect of the architecture 10 and as appropriate for particular implementations of various embodiments.

[0081] The apparatus and systems of various embodiments may be useful in applications other than a sales architecture configuration. They are not intended to serve as a complete description of all the elements and features of apparatus and systems that might make use of the structures described herein.

[0082] It may be possible to execute the activities described herein in an order other than the order described. Various activities described with respect to

the methods identified herein can be executed in repetitive, serial, or parallel fashion.

[0083] A software program may be launched from a computer-readable medium in a computer-based system to execute functions defined in the software program. Various programming languages may be employed to create software programs designed to implement and perform the methods disclosed herein. The programs may be structured in an object-orientated format using an object-oriented language such as Java or C++. Alternatively, the programs may be structured in a procedure-orientated format using a procedural language, such as assembly or C. The software components may communicate using a number of mechanisms well known to those skilled in the art, such as application program interfaces or inter-process communication techniques, including remote procedure calls. The teachings of various embodiments are not limited to any particular programming language or environment.

[0084] The accompanying drawings that form a part hereof show, by way of illustration and not of limitation, specific embodiments in which the subject matter may be practiced. The embodiments illustrated are described in sufficient detail to enable those skilled in the art to practice the teachings disclosed herein. Other embodiments may be utilized and derived therefrom, such that structural and logical substitutions and changes may be made without departing from the scope of this disclosure. This Detailed Description, therefore, is not to be taken in a limiting sense, and the scope of various embodiments is defined only by the appended claims, along with the full range of equivalents to which such claims are entitled.

[0085] Such embodiments of the inventive subject matter may be referred to herein individually or collectively by the term “invention” merely for convenience and without intending to voluntarily limit the scope of this application to any single invention or inventive concept, if more than one is in fact disclosed. Thus, although specific embodiments have been illustrated and described herein, any arrangement calculated to achieve the same purpose may be substituted for the specific embodiments shown. This disclosure is intended to cover any and all adaptations or variations of various embodiments. Combinations of the above embodiments, and other embodiments not

specifically described herein, will be apparent to those of skill in the art upon reviewing the above description.

[0086] The Abstract of the Disclosure is provided to comply with 37 C.F.R. §1.72(b), requiring an abstract that will allow the reader to quickly ascertain the nature of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims. In the foregoing Detailed Description, various features are grouped together in a single embodiment for the purpose of streamlining the disclosure. This method of disclosure is not to be interpreted to require more features than are expressly recited in each claim. Rather, inventive subject matter may be found in less than all features of a single disclosed embodiment. Thus the following claims are hereby incorporated into the Detailed Description, with each claim standing on its own as a separate embodiment.

Claims

What is claimed is:

1. An integrated liquidity enhancement system coupled to a secure marketplace, the system creating and trading one of purchaser specific derivatives and trading assets, where one of purchaser specific derivatives and trading assets comprise intangible assets of one of companies and other entities and derivative financial contracts based on such intangible assets.
2. An integrated liquidity enhancement system coupled to a secure marketplace, the system:
 - creating and trading purchaser specific derivative intangible assets of entities as defined by the purchaser; and
 - trading assets that comprise traditional securities of listed/traded entities configured and selected as a specific derivative or trading asset as defined by the purchaser.
3. An integrated liquidity enhancement system as recited by claim 2, wherein the purchaser specific derivative or trading assets may be traded in the secure marketplace and create a secondary market.

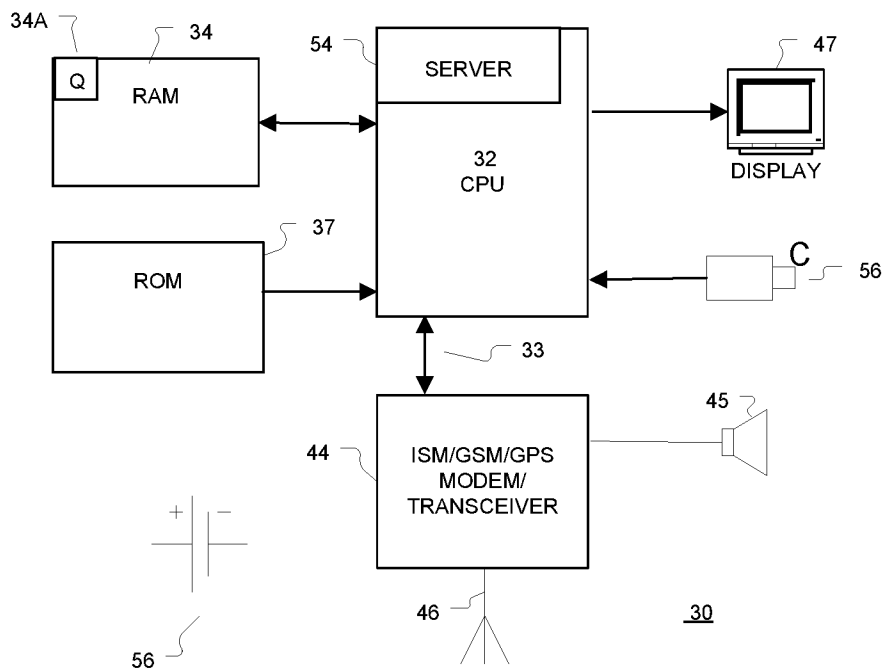


FIGURE 1