

SPECULATIVE LICENSING PRODUCTS FOR INTELLECTUAL PROPERTY ASSETS

TECHNICAL FIELD

[0001] The present disclosure relates generally to methods, techniques, and systems for supporting and/or developing financial markets for intellectual property assets and, for example, to methods, techniques, products, and systems for financial speculation related to intellectual property assets using a system of contracts.

BACKGROUND

[0002] Traditional finance and economic theory supports trading on the “futures” (e.g., future prices and/or availability) of different kinds of physical (e.g., consumable) commodities (consumption assets) and investment assets, such as bushels of wheat, corn, rice, barrels of crude oil, gold, iron ore, financial securities, short term interest rates, currencies, stock exchanges, and the like. Futures contracts are contracts that specify an exchange of some itemized number of the underlying assets at a selected price in the future. They can be bought and sold. Thus, buyers and sellers of futures contracts may engage in trades to hedge risk in a position, for example, the price of the underlying asset at some point in the future, or may engage in trades, for example, to speculate on whether the price of the underlying asset will rise or fall in the future. For example, a manufacturer of flour who knows he needs a certain amount of wheat in the future may buy futures in wheat at a named price now, to hedge against the price of the wheat going up too much by the time he needs it. Although not likely in practice, the manufacturer of flour can always choose to exercise his bought future contract to actually buy the wheat should the price go up. In this case, the futures contract would be used to guarantee a lower buying price. If the price of wheat went down, the manufacture could simply not exercise the

underlying asset purchase. Meanwhile, a speculative trader may simply buy or sell wheat futures to “bet” on whether the price of wheat will rise or fall.

[0003] Such futures contracts are bought and sold on official “futures exchanges” (for example, in the open futures pits in the New York Stock Exchange and, some time ago, the Chicago Mercantile Exchange) where traders come to buy and sell such futures contracts. These futures contracts may never result in the actual sale of the underlying promised asset – the positions of the buyers and sellers may be closed out before the future contract delivery date is reached. Explicit rules of the exchange (and the government) govern whether an asset is permitted to be traded on a futures market – for example, for agricultural and industrial commodities, the underlying asset must be in a basic, raw, unprocessed state. For example, futures in wheat can be exchanged; however, futures in wheat flour (a processed form of wheat) may not be exchanged. The open markets for trading futures contracts in investment assets are also highly regulated.

[0004] Both hedging and speculation may involve knowledge of factors that specifically relate to the underlying asset and to various other factors (such as the interest rate in the case of investment assets) that influence whether the asset will tend to rise or fall. Since the futures price will generally change daily, based upon the price of the underlying asset, commonly the futures contracts are settled daily and adjustments made to the accounts of the holders of the futures contracts for interim partial payments.

[0005] Derivative securities, such as “put” and “call” options, also may be traded. These derivative instruments are further “bets” on whether the prices of the futures contracts themselves will go up or down. Differences in the positions of the futures contracts between relevant time periods (e.g., daily) will yield profit or loss consistent with a put or call position. Risk is an inherent part of both futures contracts and such derivative instruments.



[0006] A forward contract, which is another form of a derivative security, is similar to a futures contract in that it specifies the exchange of some itemized number of goods for a specified price at a specified date in the future. However, it is not traded on an exchange, and typically (unless specified particularly), does not have interim payments. Also forward contracts are not standardized and they may be privately negotiated. Furthermore, they may be customized and may include interim settlement of profits and losses (e.g., marking to market and/or true-ups of margin accounts). Forward contracts are also used for hedging and for speculation. An owner of an asset may take a short position (to sell the underlying asset) to hedge his position in having too much of the underlying asset if the price of the asset falls (e.g., there is a glut on the market – hence less demand). His short position will “guarantee” a sale of the asset at a pre-negotiated price. On the other hand, a speculator may take a long position (a commitment to buy the underlying asset) at a predetermined price assuming the price of the asset will go up. In principle, he can then buy the asset and resale it for the greater price, thereby making a profit. Again, in a typical situation the assets are not traded – the forward contracts are simply bought and sold and/or closed out before the specified delivery date.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Figure 1 is an example block diagram of a system of sequential forward contracts for instrumenting licensing products and a system for speculation on IP assets.

[0008] Figure 2 is a table of example attributes of contracts in a sequential forward contract system for financial speculation on IP assets.

[0009] Figure 3 is an example block diagram of an example computing system that may be used to control various aspects of the creation and management of derivatives.

[0010] Figure 4 is an example flow diagram of example logic for managing the queue and open market exchanges and conversions of the SFC contracts.

DETAILED DESCRIPTION

[0011] Examples described herein provide methods, techniques, and systems for supporting and/or providing (e.g., managing, administering, organizing, etc.) a financial market exchange for hedging and speculation in intellectual property assets. Some examples provide a system of specialized sequential forward contracts (“SFCs”), which enables hedgers and speculators (hereinafter simply referred to as speculators) to speculate on the likelihood of success and/or failure of intellectual property (IP) assets without actually buying and/or selling the underlying IP assets. Generally described, IP assets refer to any type of intellectual property assets including patents, patent applications, trademarks, trademark applications, copyrights, intellectual property licenses, and the like.

[0012] Unlike some other types of investment assets, IP assets, such as patents, are particularly difficult to apply futures speculation principles to, and speculation principles generally, at least because 1) it is difficult to determine whether or who needs a license to the IP asset and 2) the holder of the IP asset can issue licenses at an infinitely low cost, thereby rendering the asset subject to infinite dilution. The IP asset holder can erode the price of the asset at every transaction by simply transferring more licenses to the asset. As a result, traditional methods for speculation on investment assets using straightforward futures contract techniques may not work well with respect to IP assets because supply of licenses to the asset is limitless. In addition, IP assets are not considered an acceptable form of asset approved for futures trading.

[0013] One contemplated model involves controlling how many licenses are made available for a particular IP asset. If more licenses are needed, the price may be artificially driven up. If less licenses are needed, the price may be artificially driven



down. However, in some scenarios, such as for emerging technology, such artificial constraints unintentionally may adversely affect and possibly even destroy the market potential for the underlying good that practices the IP asset.

[0014] Another contemplated model allows speculators to buy and to sell derivatives of the IP asset licenses on an open market, while addressing the infinite dilution problem. The set of specialized sequential forward contracts (SFCs) described herein provides an example of such a model which allows an IP asset holder to continuously issue licenses to one or more IP assets without eroding a market determined price of licenses to these assets. In fact, using SFCs, the market price of the derivative of an asset license is “discovered” by the market based upon fundamental economic principles of supply and demand without someone dictating price, typically, ahead of time.

[0015] In a variant of the derivatives model, the contracts are structured similar to zero-coupon bonds instead of futures or forward contracts. According to this variant of the system, a holder of the derivative (e.g., the contract) pays upon receiving the next contract in sequence instead of at maturity of the contract. This allows the holder to avoid having to show a liability on the holder’s balance sheet since the contract has already been paid for. In contrast, a holder of a forward contract SFC that is paid for later (e.g., when acquired, up front, or the like) will need to show a liability for the contract until it is converted to something that represents an IP license. For ease of description, an SFC will refer to either sequential forward contracts or sequential contracts that instead are paid for when received.

[0016] Figure 1 is an example block diagram of a system of sequential forward contracts for instrumenting licensing products and a system for speculation on IP assets. In Figure 1, Contract 1 (141) represents an actual license 140 to an underlying IP asset 152 or a portfolio 150 of a plurality of IP assets 151. The license 140 may be a fixed duration and/or quantity technology license. Contract 1 (141) may be acquired through the queuing system provided by the SFCs, and more specifically



upon exchange of an IP coupon 130 discussed next. Contract 2 (131) is an IP coupon 130 that can be exchanged for an actual license 140 (Contract 1, 141) to the IP asset, for example, IP asset 152, at a time of the holder's choosing (or whatever time was negotiated as part of the contract) and for a set price, potentially subject to an expiration date. Thus, Contract 2 (131) acts as a proxy for a license and does not require actually issuing the license until redeemed or until the IP coupon 130 reaches maturity. In one example, Contract 2 may be exchanged for a nominal price, so that converting to an actual license by the exercise of Contract 2 is possible without incurring a large financial impact. Contract 3 (111) is a seat 112 on a (potentially open) market exchange 113 for IP license coupons 130. In this example, a seat refers to a membership in an exchange similar to other financial market exchanges. In some examples, as explained further below, the exchange 113 is a fixed size to prevent price erosion through infinite dilution. In other examples, the exchange 113 is not a fixed size. In some examples, the exchange 113 is an open exchange governed and regulated by standard exchange organizations and rules. In some examples, the exchange is ordered according to maturity of the contracts. In some examples, a holder of a seat 112 can sell the seat 112 or redeem the contract at any time. In some examples, a person can acquire a Contract 3 111 to obtain a seat 112 at any time. Contract 4 (101) is a seat 102 on a queue 103 for entering the exchange 113 for IP license coupons 130. Thus, it provides a holding queue to additionally prevent price erosion.

[0017] Figure 1 illustrates a derivatives market and derivative products for speculation in IP assets. In some example SFC systems, each contract is a forward contract that specifies a deliverable at maturity. In one case, Contract 1 (141) (the IP license 140) and Contract 2 (131) (the IP coupon 130) expire at maturity. Contract 3 (111) at maturity yields an IP Coupon (Contract 2, 131). Contract 4 (101) at maturity yields a Contract 3 (111) (seat on the exchange 113).



[0018] In some example situations, an entity that holds an IP coupon 130 may be an entity in the supply chain of a party that holds the corresponding actual IP license 140. For example, if a chip manufacturer holds a license to an IP asset relating to memory or a high speed math processor, then it may be most beneficial to the holder of the IP asset to have every entity in the supply chain hold an actual IP license 140. However, Contract 2 (131) may be priced (e.g., lower than a real license), such that it is more advantageous for the entities in the supply chain (e.g., the graphics card manufacturer and the computer system manufacturer) to hold a coupon 130 to the IP license 140 rather than the actual license 140 with a disincentive to convert the coupon to the actual license. The ready availability of price favorable coupons 130 to an IP license 140 may help to avoid potential claims of an implied license by a downstream party.

[0019] Market 113 represents an exchange for exercisable contracts, e.g., Contract 3 (111), which are convertible or mature into an IP coupon 130 (Contract 2, 131) upon payment of a, potentially predetermined, fee. (Recall that in some variants of the SFCs, the fee may be paid ahead of time.) In some cases, market 113 is an open exchange of exercisable futures contracts which have been approved for trading by the various commissions, organizations, and/or government agencies. A Contract 3 (111), which represents a “seat” (e.g., membership position, place, etc.) on the open market exchange 112, can be converted into an IP coupon 130 by early redemption 121 at rate r_1 or may mature 122 into an IP coupon 130 at rate r_2 . A queue 103 to enter into market 113, an “exchange entry” queue, is created by selling seats (e.g., positions, places in line, spots, etc.) for entry into the open market exchange (market 113). Seats (102) in queue 103 may be issued through one or more contracts (Contract 4, 101). In some cases, these contracts are callable (futures) contracts, which allows the supplying entity (e.g., a supplier of such contracts) to control how many potential IP licenses are available at any particular time. For example, the supplying entity may “call” a Contract 4 (causing it to be



immediately exercised) to increase the number of contracts that are Contract 3, whenever a Contract 3 contract is converted to a Contract 2 contract (IP Coupon) in order to keep the market 113 a constant size. In other situations, explicit calls may occur to increase or otherwise control the size of market 113.

[0020] An SFC supplier (e.g., a “market maker”) may add momentum to the system for licensing and financially speculating on the IP assets by selling a queue position into the exchange; that is, the supplier may sell a Contract 4 (101), which represents a place in queue 103 for entering into the market 113 for exchanging the contracts (Contract 3, 111) that can be exercised or mature into IP coupons (Contract 2, 131), which represent an opportunity to license an underlying IP asset 152 or a portfolio 150 of multiple IP assets 151. In this way, if demand for a license to a particular IP asset 152 is higher, instead of the holder of the IP asset issuing more licenses 140 or coupons 130 which may erode the price of the asset, the SFC supplier can place additional requests (Contract 4, 101) into the queue. This allows supply to match demand (albeit at a delayed time) without price erosion. Demanders (people who need the IP license) can go into market 113 and buy (e.g., acquire, obtain, etc.) a Contract 3 (111) (a position 112 for exiting the open market exchange 113 with a corresponding price and expiration) from the holder of a Contract 3 (111). For example, if the graphics card manufacturer mentioned above requires an immediate license to IP asset portfolio 150, the card manufacturer can approach a speculator in market 113, buy a Contract 3 from her and immediately pay to convert Contract 3 via early redemption (121) into an IP coupon 130. The card manufacturer can then immediately pay to convert the IP coupon 130 into an actual license 140 to IP asset portfolio 150. In addition, speculators can buy (e.g., acquire, obtain, or otherwise replace) either another speculator’s queue position in the exchange entry queue (103) (i.e., an exchange entry seat 102) or in the open market exchange 113 (i.e., an open market exchange seat 112) in the order in which the market’s 113 contracts expire and convert into IP coupons 130.



[0021] There are effectively three ways for a demander or speculator (or other desiring coupon holder) to enter into the speculation system. First, the desiring coupon holder may request the SFC supplier to issue a new Contract 4 (101) for a seat at the back of the queue 103 to the market exchange 113 as a new exchange entry seat 102. Second, the desiring coupon holder may replace a current holder of an exchange entry seat 102 by substituting for the current holder of a Contract 4 (101). Third, the desiring coupon holder may acquire a Contract 3 (111) (an open market exchange seat 112) on the open market 113 in a usual means, such as by going to a broker, etc. A desiring coupon holder obtaining a seat (102) at the end of the queue (103) to the exchange (113) does run a risk that the holder will never obtain a seat on the open exchange (113).

[0022] A demander (person, entity, or the like that desires a license to the IP asset) may be more likely to enter the open market 113 by purchasing or otherwise acquiring a Contract 3 (111). However, if the demander can wait, but foresees a need in the future to have an IP coupon 130, then the demander may “replace” or “add” to the queue (by taking an exchange entry seat 102) and never ultimately enter into the open market 113 unless needed. If the demander perceives that the demand will be greater than the value on the open market 113, then replacing or adding to the queue makes sense although there remains the inherent risk that his/hers or other’s seats will not ever be converted into the open market 113. Accordingly, the price of exchange entry seats 102 through Contract 4 (101) likely goes down as fewer people believe that any new seat will succeed at reaching the open market.

[0023] A speculator (person, entity, or the like that desires to financially speculate as to the worth of the IP asset) may be more likely to try to get the absolute lowest price to get into the open market 113 by requesting or waiting for an additional seat 102 to be added to queue 103 by the supplier entity. By waiting for a seat at the end of the queue 103, the speculator faces a risk that the price for a seat will go up before purchase. For example, as adoption of a particular technology increases, the



demand for IP licenses likely increases. As this happens, the price of the Contract 4 (101) may go up and queue seat 102 may become more expensive before the speculator acts. In addition, if the speculator waits or buys a position too far back in the queue 103, the speculator may never obtain a position in the open market 113.

[0024] Forward contracts are generally paid at a designated time in the future at a pre-designated price. If an IP license 140 to IP asset portfolio 150 costs “L,” (a license fee) then it is generally paid according to the license terms, which may be immediately, over a period of time, or some other pre-designated or predetermined arrangement. In some SFC arrangements, the price for an IP coupon 130, Contract 2 (131), may be payable (for example, to the holder of the IP asset) when acquired as a Contract 3 (111). This price is set to be typically some portion of the license price, for example, “.9L,” so as to be less than a full license. The conversion price is then paid upon conversion - delivery of the license. The conversion price may be the remainder of the license fee, for example, “.1L,” or some other amount. The cost for seats in the market 113 (the open market exchange seats 112) as implemented by a Contract 3 (111) or to be on the queue to enter the market (the exchange entry seats 102) as implemented by Contract 4 (101), both for example, to speculate upon the success of the IP assets, may be set to be commensurately less and go down in price the further out in time they mature. This cost may be payable upon maturity – the Contract 4 (101) into a seat 112 in the open market 113; the Contract 3 (111) into an IP Coupon 130 – Contract 2 (131).

[0025] Another option for payment is created with the SFC contracts that resemble zero-coupon bonds. That is, payments are made up-front (in advance) to the holder of the IP asset when someone buys from into the queue 103 (Contract 4) or the exchange 113 (Contract 3). Another payment is then made to the holder of the IP asset when an IP Coupon (130) holder converts from Contract 2 (131) to a license (140) – Contract 1 (141). The holder of the SFC contract (e.g., a contract 4, 3, or 2) would buy in or sell out based upon the current market price of “L” at the time of the



transaction. Adjustments to the “L” could be made over time as price discovery occurs (e.g., supply and demand causes increases or discounts) in the open market.

[0026] Several safeguards are or can be built naturally into the SFC system to provide a self-sustaining ecosystem. For example, suppose a chip manufacturer wishes to shut down competitors. In theory, one way for the chip manufacturer to do this would be to purchase all SFC contracts for the applicable license portfolio 150 and then refuse to sell any of the SFC contracts. However, building in a natural maturity (expiration) prevents this situation. In addition, the queue 103 to enter the (open) market 113 may be finite, thereby forcing Contract 4 (101) seats 102 to mature into seats 112 on the open market 113. Other safeguards also may be devised.

[0027] Figure 2 is a table of example attributes of contracts in a sequential forward contract system for financial speculation on IP assets. Each contract type in the SFC system of derivatives designates a deliverable and a delivery price, whether the derivative is transferrable or not, may be procured by others, or expires or not upon maturity, and may include other features. For example, as shown, assuming the delivery price associated with an IP license (Contract 1) is the cost of commercializing a product that utilizes the license, then the IP coupon price at delivery (maturity or early redemption) may be set at, for example, 10% of (.1 times) the expected royalty rate, the remainder of the cost to license, or some such other number (for example, if 90% was paid upon acquiring the contract). A small delivery price (such as 10% of L) may provide a disincentive (albeit small) for IP coupon holders to actually convert to an actual license. In one scenario both the IP license and the IP coupon are non-transferrable (issued to a particular party), are not available for sale, and may or may not expire.

[0028] Also as shown, a seat on the open market exchange (Contract 3), whose deliverable when it expires is an IP coupon for an IP license, may have an associated delivery price, for example, that is 90% of (.9 times) the expected “royalty rate.” Other SFC systems may implement other delivery prices that represent more or



less of the total licensing cost “L.”. In one example SFC system, a Contract 3 is fully transferable, is auctioned and then available on the open market as described with reference to Figure 1, and has a fixed expiration when it matures into an IP coupon for an IP license. In addition it is exercisable by the holder and can be redeemed before maturity and exchanged for a corresponding IP coupon.

[0029] A seat on the queue (an exchange entry seat) (Contract 4), whose deliverable when it expires is a seat 112 on the exchange 113, may not have an associated delivery price at all – it may simply mature into a seat 112 on the exchange 113. In one example SFC system, a Contract 4 is fully transferable, is auctioned and then available in the marketplace (by, for example, brokers of same), and has a fixed expiration when it matures into a seat on the open market as described with reference to Figure 1. It is also callable by the issuer to force maturation into a seat on the open market so that the issuer can control the number of seats on the open market.

[0030] As described with reference to Figure 2, the prices of a seat on the open exchange (Contract 3) fluctuate based upon the priority in the queue. The further out in the queue, the less expensive the seat, as more risk is assumed that the contract will not mature into a coupon. In some other scenarios, the price of a seat on the open exchange (Contract 3) may be fixed and the volume fluctuate instead. For example, such a scenario may allow a holder to speculate in a manner analogous to the volatility of stock.

[0031] In some example SFC systems, to prime the system, the market maker may directly sell seats on the open market (Contract 3) by auctioning them off at staggered maturity dates. Then, the seats on the queue for the open market (Contract 4) can be issued using initial product offering (IPO) techniques, or at an auction, for example, in small blocks to capture a price curve of technology adoption. Since the seats on the open market will naturally mature at a staggered fashion, the seats in the queue mature correspondingly, and will leave open additional



opportunities for the market maker – SFC contract supplier – to supply additional seats on the queue (or not) to control the value of the derivatives.

[0032] Contracts 2, 3, and 4 may be implemented and assimilated into existing derivatives systems. For example, the push and pull dynamics are similar. In addition, options on these contracts may be similarly implemented. Traditional clearinghouses currently geared to other futures contracts may be used to handle the settlement of these types of derivatives (IP asset contracts) as with other traditional commodities and investment assets.

[0033] Although the examples described herein often refer to a contract for speculating on IP assets, the techniques described herein also may be used to for securitizing other things, for example, to spread the cost of funding something based upon speculation, such as IP asset enforcement, etc. Essentially, the concepts and techniques described are applicable to creating derivatives for any asset where the market is expanding or contracting. In addition, the exchanges and their queues (e.g., Contracts 3 and 4) can be adjusted to implement a contracting market, where an exit queue is implemented instead of an open market. Later seats essentially are designated little to no value.

[0034] Also, although certain terms are used primarily herein, other terms could be used interchangeably to yield equivalent systems and examples. In addition, terms may have alternate spellings which may or may not be explicitly mentioned, and all such variations of terms are intended to be included.

[0035] Examples described herein provide methods, techniques, applications, tools, data structures and other support to implement a SFC System to be used to create derivatives to IP licenses. In this description, numerous specific details are set forth, such as data formats and code sequences, etc., in order to provide a thorough understanding of the described techniques. The examples described also can be practiced without some of the specific details described herein, or with other specific details, such as changes with respect to the ordering of the code flow, different code



flows, etc. Thus, the scope of the techniques and/or functions described is not limited by the particular order, selection, or decomposition of steps described with reference to any particular routine.

[0036] Figure 3 is an example block diagram of an example computing system that may be used to control various aspects of the creation and management of the derivatives described herein, such as to automatically generate contracts of type 2, 3 and/or 4. Note that a general purpose or a special purpose computing system suitably instructed may be used to implement an SFC derivatives management system (an SDMS). Further, the SDMS may be implemented in software, hardware, firmware, or in some combination to achieve the capabilities described herein. Also, although described as though the SDMS forms all functions regarding SFCs, different examples may perform or implement one or more of such functions.

[0037] The computing system 300 may comprise one or more server and/or client computing systems and may span distributed locations. For example, some of the capabilities may be part of one or more trading systems utilized by computing systems organized and in some cases managed as part of the open exchange trading system. In addition, each block shown may represent one or more such blocks as appropriate to a specific example system or may be combined with other blocks. Moreover, the various blocks of the SDMS 310 may physically reside on one or more machines, which use standard (e.g., TCP/IP) or proprietary interprocess communication mechanisms to communicate with each other.

[0038] In the example system shown, computer system 300 comprises a computer memory ("memory") 301, a display 302, one or more Central Processing Units ("CPU") 303, Input/Output devices 304 (e.g., keyboard, mouse, CRT or LCD display, etc.), other computer-readable media 305, and one or more network connections 306. The SDMS 310 is shown residing in memory 301. In other example systems, some portion of the contents, some of, or all of the components of the SDMS 310 may be stored on and/or transmitted over the other computer-readable



media 305. The components of the SDMS 310 preferably execute on one or more CPUs 303 and manage the generation and use of IP asset license derivative, as described herein. Other code or programs 330 and potentially other data repositories, such as data repository 320, also reside in the memory 301, and preferably execute on one or more CPUs 303. Of note, one or more of the components in Figure 3 may not be present in any specific implementation. For example, some example systems embedded in other software may not provide means for user input or display.

[0039] In an example SDMS environment, the SDMS 310 includes one or more license derivative generation engines 311, one or more license derivative settlement engines 312, and other components, such as queue manager 313 or a user interface (not shown). The derivative generation engines 311 are responsible for generating the contracts described above with respect to Figures 1 and 2, including one or more of Contracts 2, 3, and/or 4. In addition, in some examples, the derivative generation engines 311 may be used to create a license for one or more IP assets (Contract 1).

[0040] The settlement engines 312 are responsible for determining the money owed and transferring any such credit or debits between the “buyer” and “seller” of the derivatives as are performed with other exchanges using, for example, clearinghouses. The settlement engines 312 function may in some examples be provided by existing clearinghouses. Clearinghouses may be used, for example, to guarantee payment between parties or to determine and administer cash settlement, margin adjustment, spot pricing, and/or other functions typically part of administering futures contracts and/or forward contracts.

[0041] The queue manager 313 is responsible for handling the acquisition and transfer of seats on the queue and open market exchanges, e.g., Contracts 3 and 4. The queue manager 313 may be managed by the holder of the IP asset portfolios, such as a market maker that wants to control the number and/or price of the IP asset licenses available in the market. In at least some example systems, the queue

manager 313 is provided external to the SDMS as part of a financial investment trading network and is available, potentially, over one or more networks 350.

[0042] Other and /or different modules may be implemented. In addition, the SDMS may interact via a network 350 with application or client code 355 that *e.g.*, uses results generated by the SDMS 310, such as to create reports from the various contracts created; one or more client computing systems 360 such as computers belonging to entities wishing to acquire or obtain the IP asset license derivatives; and/or one or more third-party information provider systems 365, such as purveyors of information used in licensing data repository 315 known to, for example, issuers of the relevant IP asset licenses. Also, of note, the exchange queue information data repository 316 may be provided external to the SDMS as well, for example in a manner such as a software service accessible over one or more networks 350.

[0043] In an example SDMS, components/modules of the SDMS 310 are implemented using standard programming techniques. However, a range of programming languages known in the art may be employed for implementing such example systems, including representative implementations of various programming language paradigms, including but not limited to, object-oriented (*e.g.*, Java, C++, C#, Smalltalk, etc.), functional (*e.g.*, ML, Lisp, Scheme, etc.), procedural (*e.g.*, C, Pascal, Ada, Modula, etc.), scripting (*e.g.*, Perl, Ruby, Python, JavaScript, VBScript, etc.), declarative (*e.g.*, SQL, Prolog, etc.), etc.

[0044] The example systems described above may also use well-known or proprietary synchronous or asynchronous client-server computing techniques. However, the various components may be implemented using more monolithic programming techniques as well, for example, as an executable running on a single CPU computer system, or alternately decomposed using a variety of structuring techniques known in the art, including but not limited to, multiprogramming, multithreading, client-server, or peer-to-peer, running on one or more computer systems each having one or more CPUs. Some example systems are illustrated as



executing concurrently and asynchronously and communicating using message passing techniques. Equivalent synchronous systems are also supported by an SDMS implementation.

[0045] In addition, programming interfaces to the data stored as part of the SDMS 310 (e.g., in the data repositories 315 and 316) such as through the SDMS API 317 can be available by standard means such as through C, C++, C#, and Java APIs; libraries for accessing files, databases, or other data repositories; through scripting languages such as XML; or through Web servers, FTP servers, or other types of servers or software services providing access to stored data. The repositories 315 and 316 may be implemented as one or more database systems, file systems, or any other method known in the art for storing and/or providing access to such information, or any combination of the above, including implementation using distributed computing techniques.

[0046] Also the example SDMS 310 may be implemented in a distributed environment comprising multiple, even heterogeneous, computer systems and networks. For example, in one example systems, the derivative generation engines 311, the settlement engines 312, and the contracts data repository 315 are all located in physically different computer systems. In other example systems, various modules of the SDMS 310 are hosted each on a separate server machine and may be remotely located from the tables which are stored in the repositories 315 and 316. Also, one or more of the modules may themselves be distributed, pooled or otherwise grouped, such as for load balancing, reliability or security reasons. Different configurations and locations of programs and data are contemplated for use with techniques of described herein. A variety of distributed computing techniques are appropriate for implementing the components of the illustrated example systems in a distributed manner including but not limited to TCP/IP sockets, RPC, RMI, HTTP, Web Services (XML-RPC, JAX-RPC, SOAP, etc.) etc. Other variations are possible. Also, other functionality could be provided by each component/module, or existing



functionality could be distributed amongst the components/modules in different ways, yet still achieve the functions of an SDMS.

[0047] Furthermore, in some example systems, some or all of the components of the SDMS may be implemented or provided in other manners, such as at least partially in firmware and/or hardware, including, but not limited to one or more application-specific integrated circuits (ASICs), standard integrated circuits, controllers (e.g., by executing appropriate instructions, and including microcontrollers and/or embedded controllers), field-programmable gate arrays (FPGAs), complex programmable logic devices (CPLDs), etc. Some or all of the system components and/or data structures may also be stored (e.g., as executable or other machine readable software instructions or structured data) on a computer-readable medium (e.g., a hard disk; a memory; a network; or a portable media article to be read by an appropriate drive or via an appropriate connection). Some or all of the components and/or data structures may be stored on tangible storage mediums. Some or all of the system components and data structures may also be stored and transmitted in a non-transitory manner via generated data signals (e.g., as part of a carrier wave or other analog or digital propagated signal) on a variety of computer-readable transmission mediums, such as media 305, including wireless-based and wired/cable-based mediums, and may take a variety of forms (e.g., as part of a single or multiplexed analog signal, or as multiple discrete digital packets or frames). Such computer program products may also take other forms. Accordingly, different examples described in this disclosure may be practiced with other computer system configurations.

[0048] As described in Figures 1 and 2, one of the functions of an SDMS is to manage the conversion of the forward contracts into the other forward contracts or IP asset license as appropriate.

[0049] Figure 4 is an example flow diagram of example logic for managing the queue and open market exchanges and conversions of the SFC contracts. The



blocks of Figure 4 may be processed, for example, by the queue manager 313 of Figure 3. The queue manager 313 and the flows shown in Figure 4 are used to show the conversion of the various forward contracts through the SFC system.

[0050] In block 401, the logic determines whether there is an IP coupon ready to mature into a license or whether an IP coupon holder has requested to redeem the coupon. (Recall that in some examples, these coupons do not expire. In other examples, they may be permitted to expire without maturing into an actual IP license. This flow illustrates just some of the possibilities.) If so, then the logic continues to block 403, otherwise block 405.

[0051] In block 403, the logic causes the IP coupon to be converted into an IP license. (For example, a Contract 2 becomes a Contract 1.) The logic then continues to block 405.

[0052] In block 405, the logic determines whether there is a seat on the exchange – for example, a Contract 3 – that is being exercised or has expired and is ready to be converted into an IP Coupon. If so, then the logic continues to block 407, otherwise continues to block 410 to wait for another conversion event.

[0053] In block 407, the logic causes a seat on the exchange to be exercised or converted into an IP Coupon for a particular holder, with a designated delivery time, expiry date, etc. (For example, a Contract 3 becomes a Contract 2.) Then, in block 408, the logic causes a position on the queue that is waiting to enter the exchange (e.g., a Contract 4) to be “called” if it is desired to keep the number of positions on the exchange at or around a fixed number. In so doing, the Contract 4 is converted into a seat on the exchange, which is represented as a Contract 3. Then, in block 409, the logic causes a new position on the waiting queue to be offered up, for example, through a direct or indirect offer and is placed at the end of the queue. In some example SFC systems, block 409 occurs in groups of contracts such as through an initial product offering (IPO) and/or an auction.

[0054] In block 410, the logic waits for the next conversion/queue event to be detected and, when so, loops back to the beginning of the loop in block 401.

[0055] All of the above U.S. patents, U.S. patent application publications, U.S. patent applications, foreign patents, foreign patent applications and non-patent publications referred to in this specification and/or listed in the Application Data Sheet, are incorporated herein by reference, in their entirety.

[0056] From the foregoing it will be appreciated that, although specific examples have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. For example, the methods, systems, and techniques for generating and managing IP license derivatives discussed herein are applicable to types of contracts other than sequential forward contracts. Also, the methods, systems, and techniques discussed herein are applicable to differing protocols, communication media (optical, wireless, cable, etc.) and devices (such as wireless handsets, electronic organizers, personal digital assistants, portable email machines, game machines, pagers, navigation devices such as GPS receivers, tablets, other mobile devices, etc.).



EXAMPLE CLAIMS

1. An IP asset derivative system, comprising:
 - a first contract defining a license for an intellectual property (“IP”) asset, including a set of features defining aspects of the first contract including a named licensee;
 - a plurality of derivative investment instruments based upon the IP asset license of the first contract, including one or more of an IP coupon that is convertible into a license to the IP asset and an exercisable contract that is redeemable for and/or matures into an IP coupon that is convertible into a license to the IP asset; and
 - a plurality of computing systems configured to implement a market exchange and to manage an obtaining of one or more of the plurality of derivative investment instruments and a conversion of an exercisable contract into an IP coupon that is further convertible into a license to the IP asset.
2. The system of claim 1 wherein the IP coupon is a forward contract that defines a delivery price for conversion into a license for the IP asset or a contract that is paid for when acquired at the delivery and later converted into the license for the IP asset.
3. The system of claim 1 wherein the IP coupon converts into the IP asset license of the first contract upon an expiration date.
4. The system of claim 1 wherein the IP coupon converts in the IP asset license of the first contract upon payment of a redemption fee.
5. The system of claim 1 wherein the plurality of derivative instruments based upon the IP asset license of the first contract include a sequence of forward contracts, or contracts paid for when acquired, that mature into a license for the IP asset.

6. The system of claim 5 wherein the sequence of forward contracts, or contracts paid for when acquired, that mature into a license for the IP asset occurs after a period of time, at a designated time, and/or upon a redemption event.

7. The system of claim 4 wherein the first contract is a first type of forward contract, the IP coupon that is convertible into the license to the IP asset is a second type of forward contract, and the exercisable contract that is convertible into the IP coupon is a third type of forward contract.

8. The system of claim 4 wherein the first contract is paid for when acquired, the IP coupon that is convertible into the license to the IP asset is paid for when acquired, and the exercisable contract that is convertible into the IP coupon is paid for when acquired.

9. The system of claim 4, further comprising: a fourth type of forward contract that is a callable contract for a seat on a queue to wait for entry into the market exchange.

10. The system of claim 4 wherein the first contract is a contract that is payable when acquired.

11. The system of claim 1 wherein one or more of the first contract and the plurality of derivative investment instruments are implemented as contracts with payment mechanisms that allow for payment when acquired.

12. The system of claim 1 wherein the IP coupon is a forward contract, or a contract paid for when acquired, that matures into a license to the IP asset after a designated time or upon an activation event.

13. The system of claim 1 wherein the exercisable contract is a forward contract, or a contract paid for when acquired, that matures after a designated time into an IP coupon that is convertible into a license to the IP asset or may be redeemed to obtain an IP coupon that is convertible into a license to the IP asset.

14. The system of claim 13 wherein the exercisable contract is convertible into an IP coupon upon payment of a predetermined fee.

15. The system of claim 1 wherein the market exchange is an open market where the one or more exercisable contracts can be bought and/or sold.

16. The system of claim 15 wherein the one or more exercisable contracts can be bought and/or sold as an investment asset in a futures exchange.

17. The system of claim 1 wherein the plurality of computing systems further implement a queue for entry into the market exchange and wherein callable contracts are offered for positions on the queue and, when called, the callable contracts convert upon delivery into membership seats on the market exchange and become convertible into IP coupons that are convertible into licenses to the IP asset.

18. The system of claim 17 wherein the callable contracts are futures contracts.

19. The system of claim 17 wherein payment is made when acquired.

20. The system of claim 17 wherein the queue is ordered.

21. The system of claim 20 wherein the queue is order according to a FIFO order.

22. The system of claim 1 wherein the size of the market exchange is a predetermined number.

23. The system of claim 1 wherein the size of the market exchange remains a constant size by causing a callable contract to be called and converted into a membership seat on the market exchange each time one of the exercisable contracts is redeemed for and/or matures into an IP coupon that is convertible into a license to the IP asset.

24. The system of claim 1 wherein the IP asset is a member of a portfolio of IP assets and the first contract defines a license to the portfolio.

25. The system of claim 1 wherein the IP coupon is not directly available for acquisition and acquisition of an exercisable contract bought and/or sold through the market exchange is used to obtain the IP coupon.

26. The system of claim 1 wherein a license to the IP asset is not directly available for acquisition and acquisition of an exercisable contract bought and/or sold through the market exchange is used to obtain an IP coupon that matures into the license to the IP asset.

27. The system of claim 1 wherein the plurality of computing systems further comprises a settlement engine for handling settlement contracts acquired and/or sold through the market exchange.



28. A computer-implemented method of transforming derivative investments of an IP asset license, the derivative investments including a sequence of contracts, comprising:

in response to determining that a second contract that specifies an IP coupon is to be converted an IP asset license specified by a first contract, automatically causing the IP coupon to be converted into the IP asset license by using a computing system, having a memory and a processor, to issue a corresponding first contract in place of the second contract, the corresponding first contract naming a licensee and optionally other features; and

in response to determining that a third contract that specifies a membership seat on a market exchange is ready to be converted into an IP coupon, automatically causing the membership seat on the market exchange to be converted into an IP coupon by using a computing system to cause a corresponding second contract to be issued to a holder of the third contract in place of the third contract thereby leaving a remaining seat on the market exchange.

29. The method of claim 28 wherein it is determined that the second contract that specifies the IP coupon is to be converted when a holder of the second contract submits additional payment to the licensor or other holder of the IP assets.

30. The method of claim 28 wherein the additional payment is a nominal amount such that the IP coupon can be easily converted to a license to the IP asset.

31. The method of claim 30 wherein the nominal amount is 10% of expected license revenues.

32. The method of claim 28 wherein it is determined that the third contract that specifies the seat on the market exchange is ready to be converted into the IP coupon when the third contract is redeemed or when the third contract expires.

33. The method of claim 32 wherein it is determined that the third contract that specifies the seat on the market exchange is ready to be converted into the IP coupon additionally when a predetermined fee is paid.

34. The method of claim 28 wherein the third contract is an exercisable futures contract.

35. The method of claim 28 wherein the third contract is paid for up front.

36. The method of claim 28 wherein the market is an open market for futures trading.

37. The method of claim 28 wherein the number of membership seats on the market exchange is a predetermined number.

38. The method of claim 28, further comprising:
in response to determining that the third contract that specifies the membership seat on the market exchange is ready to be converted into the IP coupon calling a callable fourth contract and, using a computing system, automatically converting the called fourth contract into a corresponding new third contract to occupy the remaining seat on the market exchange.

39. The method of claim 38 wherein the callable fourth contract is a futures contract or a contract paid for when acquired.

40. The method of claim 38 wherein the computing system that automatically converts the called fourth contract into the corresponding new third contract manages a queue for investors waiting to enter the market exchange.

41. The method of claim 38 wherein the third and fourth contracts specify a maturity date and an indication of whether or not the contract is transferrable.

42. The method of claim 38 wherein the callable fourth contract can be bought and sold to obtain a position on the queue.

43. The method of claim 38 wherein the size of the queue is constant.

44. A futures market exchange system for derivative licensing products comprising:

a plurality of membership seats in the exchange system represented by exercisable contracts that may be bought and sold by traders for a value that is determined based upon position of the seat and the likelihood the seat will be converted to an IP coupon that is convertible into a license to an IP asset; and

computer code logic, stored in a memory and executed by a computer processor, that, when it is determined that one of the plurality of membership seats has been exercised in order to be redeemed into an IP coupon or that the one of the plurality of membership seats has matured and is ready to be converted into the IP coupon; and when it is determined that a corresponding fee has been paid, converts the membership seat to an IP coupon that is convertible into a license to the IP asset.

45. The system of claim 44 wherein the computer code logic further receives a exercisable new contract to replace the converted membership seat.

46. The system of claim 44 wherein the market exchange system is an open market exchange.

47. The system of claim 44 wherein the IP asset is part of a portfolio of IP assets and the license is to the portfolio.

48. The system of claim 44 wherein the corresponding fee is a predetermined price.

49. The system of claim 44 wherein one or more of the exercisable contracts are futures contracts.

50. The system of claim 44 wherein one or more of the exercisable contracts are paid for when acquired.



ABSTRACT

Methods, systems, and techniques for supporting and/or providing (e.g., managing, administering, organizing, etc.) financial derivative instruments and a market for hedging and speculation in intellectual property assets are provided. Some examples provide a system of specialized sequential forward contracts (“SFCs”) or contracts paid for when acquired, which enables hedgers and speculators (hereinafter simply referred to as speculators) to speculate on the success and/or failure of intellectual property (IP) assets without actually buying and selling the underlying IP assets or acquiring licenses to them initially. An SFC derivatives management system (an “SDMS”) is provided to manage generation of the derivatives and their acquisition and conversion.

