

## ABSTRACT

Collaborative Purchasing is a new method of buying and selling luxury assets, and any goods online.

Whilst Collaborative Purchasing has certain similarities to the elements of a traditional raffle mechanism, especially at the last stage of the process, it has a completely different business ideology of synergy between buyers and sellers. The Collaborative Purchasing platform is continuously functioning as an e-commerce e-retail venue that facilitates consumer-to-consumer and business-to-consumer sales. The core paradigm of the Collaborative Purchasing method is to provide a n innovative and powerful model/channel of e-retailing for vendors and consumers.

The Collaborative Purchasing mechanism provides easy-to-use, simple-to-understand, transparent and fair e-alternative to the on-line and off-line lotteries, and in this aspect provides distinctively higher mathematical chances of winning. The raffle-like component of the Collaborative Purchasing shall smooth the tremendous distortions and deficiencies proliferating in the contemporary lottery propositions (low chances of winning combined with occasional extraordinary large winnings) by deploying simple model and technology weaving together numerous B2C, C2C, and peer-to-peer relationships and interests, thus facilitating a continuous flow of win-win transactions.

The most appropriate immediate application of the concept is seen in purchasing luxury assets with market values exceeding the financial capacities of willing acquirers. However, the process can be equally structured to sell legitimate assets of any value.

One of the preferred embodiments of the Collaborative Purchasing method is implemented based on peer-to-peer blockchain technology.

## References Cited U.S. PATENT DOCUMENTS:

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Other (to be quoted in Nonprovisional Application)

## BACKGROUND OF THE INVENTION

Whether we like it or not, people play lotteries, and they do play a lot, and they always will. But why? Poor people play much more than well-off people do as for the poor a lottery is normally nothing but a desperate attempt to make ends meet and, possibly, to jump to the upper social deck. For them, the lottery usually is not a fun, but an act of last resort. Thus, it makes a mass market. That is why traditional lotteries are often called “a tax on the poor”. And yet, the factual volume of the official large lotteries surpassed \$320 billion in 2017 and is continuously growing. Expected CAGR of the official market in 2018-2030 is 10%.

It is ironic that whilst the chances of substantial winning in modern lottery are minute (average odds are ranging from 1 in 100 million to 1 in 600 million), those lucky few who win, win much more than they would need, whilst the overwhelming majority wins nothing at all.

“Normally nothing, occasionally overmuch” – abnormal situation so typical for the modern world in general, and the modern economy in particular.

Collaborative Purchasing is a new type of selling channel for luxury goods based on dynamic algorithms with elements of draw games/games of chance of raffle-type with extraordinary high chances of winning compared to traditional large-scale lotteries. The Collaborative Purchasing method is a method of establishing and administering an online marketplace, further referred to as the Platform.

Whilst the business model of Collaborative Purchasing method is virtually independent of any specific technological embodiments, it may be implemented with heavy leverage of contemporary and perspective technologies of blockchain and digital tokenization. In blockchain/tokenization embodiment, the core operational instrument of the Collaborative Purchasing method is a digital token, which is a hybrid of fungible and non-fungible digital blockchain-based electronic tokens.

## BRIEF DESCRIPTION OF THE DRAWINGS

The detailed description is provided with reference to the accompanying figures. In the figures, the left-most digit(s) of a reference number identifies the figure in which the reference number first appears. The use of the same reference numbers in different figures indicates similar or identical components or features.

FIG.1 depicts a schematic view of the process of listing and selling an item on the Platform.

FIG.2 depicts a schematic view of the functions of the Organizer/Administrator of the Platform.

FIG.3 depicts a schematic view of the process of searching for and placing bids for buying an asset on the Platform.

FIG.4 depicts a schematic view of the functions of the Organizer/Administrator of the Platform in embodiment which includes formation of the virtual Cooperative Purchasing Community which is interconnects buyers interested in acquisition of a particular target asset.

FIG.5 depicts a schematic view of the process of searching for and placing bids for buying an asset on the Platform through the virtual Cooperative Purchasing Community.

FIG.6 depicts a schematic prototype view of the buying user interface of the Platform.

FIG.7 depicts a schematic view of the process of placing electronic bids for and buying items on the Platform using blockchain and digital smart contract mechanisms.

## SUMMARY OF THE INVENTION

This disclosure describes a method to establish and administer a digital e-commerce system, an online marketplace, that facilitates consumer-to-consumer and business-to-consumer e-sales of exquisite luxurious products of high market value.

By considerably simplified analogy, such a system is constantly functioning platform (the Platform) for continuous digital raffles. In one of the embodiments the system is presented by the private blockchain cryptographic platform, including a variation where cryptographic non-fungible tokens are sold to the perspective buyers willing to place their bids for the acquisition of a target transaction asset.

The selection of the brands and products offered as transaction assets is based on emotional attachment of the target audience and compatibility of the brand with the noosphere of the online marketplace, though technically the proposed invention method is eligible for commerce in any goods.

The present method of the Collaborative Purchasing offers to a potential buyer an opportunity to acquire luxury assets through imitation of playing a hybrid lottery by combining efforts and limited resources with other buyers who have similar interests and budgets.

In one of the embodiments of the concept, the interests of buyers are combined through creation of common-interest-based, purpose-bound peer-to-peer virtual community, whose existence is limited in scope and in time by the purpose of acquisition of the desired asset and consequent allocation of the asset to a particular member of the community ultimately chosen by unanimous consensus of community following strictly established, formalized, automated and pre-accepted rules.

The Collaborative Purchasing method provides incomparably higher probabilities of acquiring an asset of interest compared with probabilities of winning a prize in traditional lotteries, and does it in a transparent, concise, comfortable, cost efficient and safe way, as easy to understand and get used to as implementing routine purchase transactions on traditional e-retail platforms. Simultaneously, it equips the private and corporate sellers with a principally new powerful sales channel.

The Collaborative Purchasing method is organized, operated, and processed online through user-friendly electronic Platform of the Organizer with overall user environment similar to eBay.com, Amazon.com or other well-established e-retailers.

However, it is strikingly different as from the contemporary e-retail marketplaces so from on-line and off-line lotteries.

The differences of Collaborative Purchasing from traditional e-retailing marketplaces and games of chance are that: (1) each participant has high chance of acquiring the asset of interest for the fraction of its value; (2) the probability of acquiring the asset at a fraction of its market value is high, mathematically predetermined, transparent, guaranteed and not subject to change; (3) the Platform provides continuous flow of assets for purchasing.

## DETAILED DESCRIPTION OF THE INVENTION

Collaborative Purchasing will function as an integrated Platform for a new type of e-commerce venue.

The participants of Collaborative Purchasing are: (1) Buyers – individuals, households, interest associations and clubs, etc. - who are looking to acquire particular high-value asset of interest at a fraction of a fair market price of it and prepared to bid this paid fraction of an asset price under regulated chance provisions; (2) Sellers – individuals and corporations who want to sell their high-value assets at fair market prices (e.g., new or used luxury cars, new or used luxury watches, luxury real estate, yachts, etc.); (3) Organizer – company, which runs integrated on-line environment of the electronic listings of the assets, facilities for creating virtual communities of bidding buyers, accumulating bids, processing payments and transactions between Buyers and Sellers, provides rules, tools, and mechanisms of structuring relationships and transactions and ensures implementation of the transactions in accordance with established regulations and bylaws of the environment (further referred to as the Platform).

The social and economic benefits of the Collaborative Purchasing method are: (1) Buyers get high-success-probability opportunity to acquire desired assets for a fraction of a cost with minimal procedural and transactional efforts; (2) Sellers get powerful new sales channel for their products; (3) Organizer/Platform Owner gets decent profit; (4) Society receives major part of the Platform profit through the taxes and donations to the public good under supervision of the trusted board.

The Collective Purchasing is asset-centric: the owners of the assets - as individual, so the corporate Sellers - submit their proposals to the Organizer to list their assets for sale on the Platform. After verifying eligibility of the Seller, the assets and the offered terms and accepting the Seller's proposal, the Organizer lists the asset in an open access for the bidding by the registered Buyers, just like sellers list their goods on eBay.com, AMAZON.com, ETSY.co, Shopify.com, or any other mainstream retail e-commerce venues.

However, the assets are sold not by conventional pay-to-get purchase algorithm, but through accumulating bids from the interested Buyers. Each bid is equal to a fixed fraction of the stated price of the asset. The price of one bid and the total number of the bids accepted for the asset is predetermined, fixed, and set by the Organizer. The total value of bids cannot be less than the listed price of the underlying asset.

To have a chance to acquire an asset, a Buyer must buy at least one bid. The more bids she buys, the higher the probability that she will be chosen as the ultimate owner of the asset. The virtual bidding community is formed of the group of Buyers, who bought at least one bid for the target listed asset. The virtual community is complete when the minimal threshold number of bids for the particular asset are sold.

The bidding community bids for a singular, individualized asset of their choice, e.g.: a house; a car (new or used); expensive jewelry (new or used); other similar items (assets, products, or services) of high market value. The assets are classified by categories - similar to how it is done on eBay.com, AMAZON.com, ETSY.co, Shopify.com, or any other retail e-commerce venues - to the process of search and choice by the Buyers maximally comfortable.

If a corporate Seller has a continuous supply of the assets to sell – for example, automakers or car dealers have a stream of cars to sell, a watchmaker has a stream of watches, developers have a pipeline of houses, etc. - then the identical assets for different types of products of a particular Seller may be listed for bidding regularly or periodically, for example every week or every day, depending on capacities and willingness of the sellers and the prevailing market conditions.

Since the operational costs of organizing a sale on the Platform are low and mostly automated, the Organizer can effectively run millions of sales for different items as of individual, so of corporate Sellers every day, like major e-retailers do.

To facilitate the sale of the listed asset, the Platform issues a series of fixed limited number of electronic bids, each of equal price, each having unique number, for the total monetary amount which is larger than the price asked by the Seller for the target asset by a factor predetermined by the Platform. For example, if such factor is set as “2”, it means that total revenue from the sale of the particular asset will be twice as much as the price the Seller wants to get.

The number of bids is fixed for each target asset. This means that a fixed number of bids is sold for bidding a particular target asset. Once this number is sold, no further bids are accepted, and the draw is done by selection of one electronic bid out of the total array of electronic bids sold for the particular target asset. The selection is made through proprietary secured unbiased random number generation algorithm. The algorithm is coded in such a way that each selection returns one, - and only one, - electronic bid, which means that one owner of the electronic bid gets the target asset each time the sale is made. There cannot be the situation when no electronic bid is selected during the sale.

After the sale is complete, the Seller gets the amount of his price, the selected Buyer gets the target asset, and the Organizer gets his income for organizing the sale to cover the costs, to donate, to pay taxes and to make profit, which depends on the mark-up factor set for the particular sale.

As an example, let us say that a seller wants to sell his Villa in Monte Carlo. The fair market value of the villa is \$10 million. The Seller submits his asset proposal to the Platform. The Organizer verifies the eligibility of the Seller and the asset, and upon successful completion of due diligence lists the house for the sale on the Platform on a certain time and date, say, 7 p.m. P.S.T. of the date falling on the day standing one month from the date of listing. Essentially, this time and date mean that the Platform closes the sale of the electronic bids to acquire the item on 7 p.m. P.S.T. of the particular date which is the date one month after the date of listing.

The Platform lists the asset online by including it into the Platform catalog (like eBay.com, AMAZON.com or other online marketplaces list products of their sellers), announces the parameters of the sale to be held for this asset, issues and sells online fixed number of electronic bids. The amount and price of bids are known to the buyers beforehand, thus the chances of each individual Buyer to acquire the asset, depending on the number of bids bought, are clear and straightforward.

Let us suppose that the Platform issues 2 million electronic bids at \$10/each, each having unique number which will be later used to determine the Buyer through random selection by the automated algorithm.

Thus: (1) The Seller's price of the house is \$10 million; (2) the total amount of bids issued is \$20 million (2 million bids \* \$10); and the probability of acquiring the house by a holder of one bid is one in 2 million, which is considerably higher (in some cases, by hundreds of times) compared to well-established games of chance which offer similar pay-offs.

Buyers who want to buy a villa in Monte Carlo seek on the Platform search engine through the category listings, find the asset they want, and buy bids online until all 2 million bids are sold.

The searching for the proper asset and buying electronic bids for the asset are as simple for the Buyers as searching and buying products on eBay.com or AMAZON.com, and other well-established online marketplaces. Buyers use key words (e.g., “ROLEX DAYTONA”, “G-Class”, “Glenwagen”, “Rolls-Royce Cullinan”, “House in Malibu”, etc.) or shuffle through the

categories/subcategories, such as: “watches”, “cars”, “jewelries”, etc.; or sorting filters, such as: “high-to low probability of acquiring”; “low to high price of the bid”; etc.

On the preliminary announced time-date, the sale of the asset is implemented through the selection of the winning electronic bid by the random selection through automated algorithm of the Platform (random number generator). The Platform further provides legal support in making the deed of transfer of the real estate from the Seller to the Buyer with all other auxiliary services. The Buyer will have a choice to sell the item to the Platform for the price of the Seller and thus to take monetary value of the item instead of entering possession of the item itself.

As a result: (1) the Buyer enters possession of the sold item (the villa); (2) the Seller receives his \$10 million; (3) the Organizer receives his \$10 million revenue to cover the costs of organizing, guaranteeing the deal, insurance, marketing, providing auxiliary services, making donations, paying taxes and to make a profit.

In yet another example, let us suggest that automaker, or auto dealer desires to sell luxury cars of a particular model on the Platform. Let us further suggest that the fair market price of the typical car she wants to sell is \$355 000. Seller submits her asset proposal to the Organizer’s for the items of this kind to be sold through the Platform online, three cars each week.

The Organizer verifies the eligibility and, if approved, lists the cars for the periodic sales on a weekly basis on certain times and days (e.g., 7 p.m. PST each Monday, Thursday, and Saturday).

The Organizer lists the cars online on the Platform along with the parameters of the bidding to be held, issues, and sells online fixed number of electronic bids. The amount and price of the electronic bids are announced to the buyers beforehand, thus the chances of acquiring the car for the holder of one bid are clear.

Say, the Organizer issues 71,000 electronic bids at \$10/each. Each electronic bid has a unique number which will be later used to determine the Buyer through random selection by an automated algorithm.

Thus: (1) the Seller’s price of a car is \$ 355 000; (2) the total amount of bids issued \$ 710 000 (71 000 tickets \* \$10); (3) the probability of winning a car for one electronic bid is one in 71 thousand, which is considerably higher (comparably, by the thousands of times) than, e.g., in playing well established games of chance.

Buyers who want to have the car (say, new G-Class Geländewagen) search on the Platform’s search engine through the category listings, find the car they want and buy bids to bid online until all 71,000 electronic bids are sold. The process is similar to buying goods on eBay.com, Amazon.com, or other online retail marketplaces except that the ultimate single Buyer will be selected out of the holders of the electronic bids at the announced time and date similar to how it is done in public lotteries for the selection of a winner. The selection of the winning Buyer is implemented through the automated algorithm of the random number selection belonging to the Platform, which selects the winning electronic bid.

As a result: (1) the Buyer of the winning electronic bid receives in possession the car of his dream; (2) the Seller receives her \$355 000 for the sale of the car; (3) the Organizer receives his \$355 000 to cover the costs of organizing, guaranteeing, insurance, legal and customer support, other auxiliary services for implementing the deal, to donate, to pay the taxes and to make a profit; (4) while the next car is listed for the next sale.

The Platform can act either as a provider of the services both to the Sellers and Buyers, or act as an agent of the Sellers, or reseller of the items the Sellers offer for the sale. For those familiar with

the art and commercial law, it is clear that the difference between such various embodiments of the status of the Platform will be in the process of the transfer of the title of ownership and related rights and responsibilities.

When the Platform acts as an independent provider of the services of the electronic online marketplace, the Platform does not enter into possession of the items sold, and the sale-purchase contract is concluded between a Seller and a Buyer, and the last may be represented either individually or by the Virtual Purchasing Community they belong to.

When the Platform acts in its own name but as an agent of the Sellers, the sale-purchase contract is concluded between the Platform and the Buyer, and the latter may be represented either individually or by the Virtual Purchasing Community they belong to. The title of the ownership for the item sold is transferred from the Platform to the Buyer, after it has been transferred from the Seller to the Platform on the basis of the agency agreement.

When the Platform acts in its own name as a reseller of the items, the sale-purchase contract is concluded between the Platform and the Buyer, the latter being represented either individually or by the Virtual Purchasing Community they belong to. Prior to such a contract between the Platform and the Buyer, another sale-purchase agreement is concluded between the Platform and the Seller, where the Platform purchases the item from the Seller at agreed price, for further resale with a markup as the Platform considers appropriate. The title of the ownership for the item sold is transferred twice: first, from the Seller to the Platform, and, later, from the Platform to the Buyer.

Any of such alterations in the status and process of the transfer of ownership are regulated by the terms and conditions of the listing, selling, and purchasing of the item through the Platform, and are well known to the commercial law and conventional business customs and practices. Such terms and conditions, and appropriate electronic contracts, may be preset, administered and updated by the Platform, which is currently the generally accepted practice throughout the online retail commerce.

FIG.1 is a flow chart illustrating the process of listing an asset for sale on the Platform by a seller of the item in accordance within the present invention.

As a first step, the Seller will navigate to the Platform web-site (101), and select the segment of the Platform designed for the sellers. Depending on their status, the Seller can sign up and open selling account (110) with the Platform, registering his personal identification data and undergoing KYC verification procedures 109. After registering the Seller's account, the Seller can login (104) into the Sellers hub designed for selling the items.

Depending on the type of the item they want to sell, the Seller will have either first to register new item to undergo the verification and due diligence procedures (105-107) or to relist an item similar to the one (-s) sold by them on the Platform before (108).

The Seller further inputs the price for the item (111) and select desired time and date for the sale to commence (112). If approved by the Platform, the asset is listed for the public access (113). As the Platform issues and sells the electronic bids to the registered Buyers (FIG.2), the Seller can monitor the process of the sold bids' accruals (114). If the monetary value of the bids sold achieves the value of the price set by the Seller and the threshold set by the Platform (115), the sale event commences on the preset Time-Date and one electronic bid is selected out of the bids sold for the target item through secured random number selection algorithm run by the Platform. As the Buyer of the selected bid is defined, the Platform informs the Seller about successful sale and provides the details on the Buyer to whom the asset shall be shipped (119). Once the asset is shipped (120), the Seller gets paid the price of the asset by the Platform (121).



FIG.2 is a flow chart illustrating the process of listing and selling an asset on the Platform in part of the Platform administration.

Once the Seller applies for the listing of an asset to sell on the Platform (201), the Platform defines whether it is a registered Seller (202). If the Seller has been registered, the Platform verifies the eligibility of the asset for sale on the Platform (203-204). If the requested asset has not been sold by the Seller on the Platform before, it must undergo verification by the Platform experts (205). If the asset has not been approved for the listing, the Platform will contact the Seller with explanations and trying to find appropriate solution (206-207). Once the proper solution is found and the asset has been approved for the sale, the Platform will assist the Seller with selling the asset through proper presentation of the asset (210). The Platform will define the number and price of electronic bids to be sold to the Buyers to participate in the asset sale and will select the time and date for the sale to commence (211-213). The Platform will further define the minimal threshold of electronic bids sold which shall be achieved by the defined time and date for the sale to commence (214). Once these procedures are done, the asset will be listed for the sale (215) and the Platform will start selling the electronic bids to the Buyers (216).

By the defined time and date the Platform ascertains whether the minimal required number of bids is sold (217). If not, the sale is cancelled and the proceeds from the sale of the electronic bids are returned to the Buyers. The asset may be relisted or otherwise handled by agreement with the Seller (218-219).

If the minimal number of electronic bids are sold, which shall cover the Seller's price and the Platform markup (220) by the time and date preset for the commencing of the sale, then on these time and date the Platform runs random selection algorithm which selects one bid out of all the bids sold for the target asset (221). The selected bid gives the right to its holder to enter possession of the target asset.

After the bid is selected and the Buyer. Who is holding the selected bid, has been defined, the Platform send notification to the Seller that the listed target asset has been sold and the Seller has to ship the asset to the Buyer whose contract and delivery details are provided, and further monitors the shipment (222). Once the asset is shipped by the Seller, the Platform pay to the Seller the price declared by the Seller during the listing of the asset (223). The markup of the Platform is distributed to cover the costs of organization, administering and rendering auxiliary services to the Sellers and Buyers, such as logistical, insurance, legal and tax services (224). After covering the costs and paying the due taxes, the Platform distributes the net profit for donations and retained earnings (224-225).

FIG.3 is a flow chart illustrating the process of searching for and buying assets on the Platform. Once a buyer navigates to the website of the Platform (301 – 302) they are prompted to confirm whether they are registered user (303). If affirmative, the buyer is prompted to login into the registered account (304). After login, the buyer can either contact customer service of the Platform for whatever outstanding questions may be (305-307), to make their routines (311), or to proceed with the search for the desired assets (310). Once the Buyer found the desired assets, they can add the assets into their online shopping cart and decide whether to proceed with the purchases (311-314). IF they proceed to the checkout (315), they will b prompted to confirm the purchase and number of the bids for the particular asset items (316, 318). If they still have second thought, they can save the carted assets for later (319). If they decide to buy the bids, they can select the number of the bids they buy for each of the carted assets (318) and proceed to the payment (323). Once the bids have been bought, the Buyer can monitor the process of the bids accrual for the assets of their interest as the other buyers buy the bids (324). It is important because each listed item has a threshold of the minimal number of the bids to be sold. If the

number of the sold bids has not achieved the threshold by pre-established time and date, the purchase is abandoned and the funds for the purchased bids are returned to the Buyer (325, 320). If the threshold has been achieved, on the time and date set for the commence of the purchase the Buyer will check whether his bid was selected out of all the others (326). The Buyer can check it through the unique identification number (-s) assigned to their bid (-s) and see the result of the sale. In any case, the Buyer will be notified by the Platform as regards the results of the purchase for the particular target asset. If the Buyer's bid was selected by the random number selection algorithm (325, 327), the Platform and the Seller will proceed with the shipping of the item to the Buyer. If the Buyer does not own the selected bid, they can see the results of the purchase and proceed with the shopping for other purchases (321).

The luxury products market has a plenitude of peculiarities as regards the consumers. The major appeal of luxury products is the sense of belonging which their owners acquire buying such products. The allure of the luxurious brands, along with the high quality of the products per se, is analogous to fandom or membership in an exclusive club. Such is the merit of the luxury products that their owners tend to have feeling of respect, mutual attraction, reciprocal sympathy, camaraderie, and even fraternity. These commonality of tastes, interests, esthetical preferences, and similar sentiments are natural attributes for social networking and formation of social interest groups.

These form the rationale for one of the preferred embodiments of the Collaborative Purchasing Platform which leverages such nuances of the luxury products consumer archetype to add value to the online shopping experience. This embodiment variation includes formation of the Virtual Cooperative Purchasing Community (V.C.P.C.) for each specific purchase, illustrated in FIG. 4-5.

The embodiment of the purchasing process which includes the formation of the Virtual Cooperative Purchasing Community is generally similar to the basic embodiment described herewith and demonstrated in FIG.1-3, but the treatment of the subprocess of the electronic bidding is different, as illustrated in the FIG.4-5.

When a buyer-bidder selects the item she want to acquire and buys an electronic bid to bid for the item she automatically becomes a member of the Virtual Cooperative Purchasing Community (227, 228, 229,...) which is formed of all the buyers-bidders who have bought the electronic bids for the particular item. The bid she has bought, being identical in nature to all other bids sold for the target asset in all respects except for the unique identical number assigned to it, becomes a stake in the Virtual Cooperative Purchasing Community. One bid equals to one stake. Provided that the threshold set for the number of the electronic bids to be sold has been met (217,... , at the time-date preset and announced by the Platform for the sale of the item, the item is sold, and the title of ownership is transferred to the Virtual Cooperative Purchasing Community (230,... ).

The proceeds accumulated by the Platform, including the amount due to the Seller, may be held in an escrow account by the Platform until the item is shipped by the Seller and received by the Buyer. For the Platform, the Buyer is represented by the Virtual Cooperative Purchasing Community, and once the threshold of the number of electronic bids sold has been met, the deal is concluded on the time-date previously announced for the purchase of the target asset. However, for the Seller, the Buyer shall be represented by the individual unanimously chosen within the Virtual Cooperative Purchasing Community by pre-established procedure, for example, the procedure described herewith.

In the meantime, the Virtual Cooperative Purchasing Community holds its own internal raffle deciding who of the members of the Community will come into possession of the item thus purchased, for the item shall belong to a single member of the Community. The raffle is run by

the random number generator proprietary and protected algorithm which belongs to the Platform and is provided to the Virtual Purchasing Communities as a free service (231, 232, 329). The raffle within the Virtual Purchasing Community may be held immediately after or simultaneously with the completion of the purchase, on the time and date of the purchase. Until then, the purchased item is held in the collective ownership of the Virtual Cooperative Purchasing Community.

Once the selection of the single member/stakeholder of the Community is complete, the Virtual Cooperative Purchasing Community is dissolved (233, 321) and selected stakeholder, aka. the Buyer, as a sole owner of the Virtual Cooperative Purchasing Community, automatically sends payment to the Platform in amount paid for all the stakes purchased (234, 332), and the Platform sends automatic notice to the Seller to ship the item to the selected Buyer (235) and monitors the delivery of the item to the Buyer along with provision of other auxiliary services, which may optionally include customer and technical services, insurance, legal support, tax support, and other services (222, 327).

It shall be noted that the notice to the Seller to transfer the sold item to the individual, single Buyer may or may not mean transfer of ownership directly from the Seller to the Buyer, depending on the legal arrangement of contractual relationships between seller, buyers, and the Platform. In some embodiments such notice may mean notice to transfer the title of ownership first from the Seller to the Platform, and later the Platform transfers the ownership to the Buyer, as described above.

FIG. 7 illustrates the sample user interface of the Platform in part of the functionality for the buyers. A buyer can enter the search key words into the Platform search engine (601), research the results of the search (602), including the data describing the terms of the bidding for an item, such as price of one bid, number of bids sold, and probability of winning the bidding (603).

One of the preferred embodiments of the process of the Collaborative Purchasing is based on the blockchain distributed ledger mechanism used as a fundamental, underlying engine of the Platform. Such an embodiment is illustrated in FIG. 7.

This embodiment is essentially a system of smart standardized contracts run in their unity in the private blockchain environment administered by the Platform.

In this embodiment the Virtual Cooperative Purchasing Community is formed out of the buyers of the electronic bids issued by the Platform and established as a Distributed Autonomous Organization (DAO), or other similar nascent form of the virtual enterprise/legal entity. The electronic bids, issued by the Platform have status of electronic stakes in the equity of the DAO. Similar to the electronic bids described above, each electronic stake has equal value and price, and the number of stakes issued depends on the price of the item listed for sale. The only purpose of the DAO is to acquire specific item, and there is no other contract which the DAO can enter unless directly related to the purchase of the item.

The Platform provides secretarial, custodial, legal and other auxiliary services related to creation of DAO, issue and sale of the electronic stakes in the equity of the DAO, purchasing the item for acquiring of which the DAO has been created, payment and transfer of the title of ownership of the item, shipping and handling, and, when the purchase is complete, the dissolution of the DAO.

The process of listing and purchasing an item in the blockchain embodiment is generally similar to the archetypical parts of the online marketplace processes except for the full automation of the subprocess and relationships between the participants by standardized smart contracts, which are specially programmed codes containing terms, conditions, responsibilities, rights and obligations of the participants who accept and enter into such contract, and other covenants and legally binding terms needed for smooth implementation of the purchase of the item.

As a first step of the process, Seller submits an asset to the Platform for listing admission. The Platform implements due diligence of the submitted asset and the Seller and, if both are approved for listing, authorizes the assets to be listed for sale (701). Smart Contract (I) is concluded between Platform and Seller where Platform buys Asset from Seller under provision of successful event, namely: “the threshold number of stakes in DAO equity are sold and the sale of the item happens at Time-Date “A””, which serves as one of the key conditional elements of the smart contracts.

The Platform further establishes DAO, formulates the purpose for which DAO has been established (purchase of the target asset), determines the time and date for the sales of the asset (Time-Date “A”), determines the number of electronic stakes in the equity of the DAO to be issued along with the threshold number of the stakes to be sold by the time and date of the sale (Time-Dates “A”) to make the sale effective, administers sale of the electronic stakes and overall process including customer services, technical and advisory support (702).

The Platform creates DAO as a virtual SPV for purchase of the asset, and issues and sells fixed discrete electronic stakes, each representing equally divided percentages in DAO equity. The number of stakes is definite and defined by the Platform. In accordance with the DAO charter, all the proceedings received by the DAO from the sale of its equity can only be used by DAO to purchase the target asset from the Platform. The charter of the DAO also contains provision about minimal threshold of the electronic stakes which shall be met to complete the purchase of the asset by preestablished time and date. If the threshold amount is not achieved, the DAO objective is not met, the purchase of the item is abandoned, the proceedings from the sale of the electronic stakes are returned to the buyers and the DAO is dissolved (703).

Buyers, registered on the Platform and interested in acquisition of the particular asset, which they found navigating through the Platform listings, buy electronic stakes in the DAO equity. Once a Buyer paid the price of 1 electronic stake he becomes an owner of 1 stake (fixed share, percentage) in the DAO equity. A Buyer may buy several stakes or even all of them, if there are no other buyers. The purchase of stakes is regulated by the Smart Contract (II) between the buyers and the DAO, being analogue to traditional corporate Articles of Association and Shareholders Agreement). At this stage, there is not direct contractual relationships between the buyers and the Platform except for the auxiliary services the Platform renders to DAO (704).

Smart Contract (II), i.e., equivalent to the DAO Stakeholders Agreement, further contains provision that:

(1) the DAO shall conclude the Smart Contract (III) with the Platform for the purchase of the target asset from the Platform for which the DAO shall transfer the whole amount of the equity float proceedings to the Platform at Time-Date “A” as a payment for the purchase of the target asset;

(2) once the title of ownership for the asset is transferred from the Platform to the DAO, the stakeholders unanimously agree immediately select a single stakeholder who become the sole owner of the DAO and to whom all the stakes in the DAO equity are transferred by all the other stakeholders irrevocably and without any compensation to the transferring stakeholders. The selection of the sole stakeholder who thus becomes the sole owner of the DAO is implemented automatically through the random number selection algorithm belonging to the Platform. The algorithm selects one stake out of all the electronic stakes sold by selecting a single identification number unique to each stake; (3) once the transfer of all the stakes to a single selected stakeholder has been implemented, the selected stakeholder becomes essentially the owner of the target asset transferred from the Platform to the DAO. The DAO is further dissolved, and the single stakeholder becomes the owner of the asset in their own name.

Once all stakes in the DAO equity are sold, or the minimal threshold of the number of stakes sold is met, a Smart Contract (III) is immediately concluded automatically between the DAO and the Platform where the Platform sells to the DAO the target asset for an amount equal to the proceedings of the sales of the stakes in the DAO equity. The trigger event for the payment from the DAO to the Platform and transfer of the asset from the Platform to the DAO is the emergence of the Time-Date “A” (the Collaborative Purchase time and date pre-announced by the Platform in the listing of the target asset). Prior to the trigger event the proceedings from the sale of the stakes in the equity of the DAO are kept in the DAO escrow-type account under MultiSig status (i.e., all stakeholders must sign to release the use of proceedings, i.e., factually under 100%-quorum self-escrow account). However, the trigger event (time and date assigned for the sale of the asset, which have been stated in the listing on the Platform) triggers within the Smart Contract (III) an irrevocable automatic payment to the Platform as the payment for the purchase of the target asset, when no signatures needed from the stakeholders of the DAO to effect the payment (705).

(706) The event of the purchase of the target asset happens at Time-Date “A”, which serves as a trigger event for:

automatic payment from the DAO to the Platform within the Smart Contract (III) of the proceeds accumulated from the sale of the electronic stakes for the purchase of the target asset;

automatic payment from the Platform to the Seller within the Smart Contract (I) of the target asset price preset by the Seller in the original listing;

automatic transfer of the title of ownership for the target asset from the Seller to the Platform within the Smart Contract (I);

automatic transfer of the title of ownership for the target asset from the Platform to the DAO within the Smart Contract (III);

selection of the single stakeholder out of all the stakeholders of the DAO within the Smart Contract (II) by secured and unbiased random number selection algorithm proprietary to the Platform;

dissolution of the DAO within the Smart Contract (II) and transfer of the title of ownership for the asset into the personal possession of the single stakeholder of the DAO as a matter of succession of the property of the dissolved DAO to its single owner;

All these events (706) are triggered and emerge simultaneously, i.e., at a singular moment of time, immediately after the coming of the Time-Date “A”, through the system of harmonized smart contracts between the Seller, the Platform, and the Buyers.

Thus, the chances of each stakeholder of the DAO to acquire the target asset depend solely on the number of the stakes they hold.

As a variation of the described embodiment, the DAO may be formed by the Platform, which will remain a partial stakeholder in DAO for the percentage of equity that provides the Platform with the desired markup to the Seller’s price of the target asset. In such embodiment, the number of stakes sold to the independent buyers will equal to the total number of stakes issued decreased by the number of stakes held by the Platform. Such embodiment presupposes a special clause in the smart contracts regulating DAO which assigns distribution of the proceedings from the sale of the stakes in the equity of the DAO and further distribution of the assets of the DAO during its dissolution as to the selected stakeholder so to the Platform in defined percentages.

For those familiar with the art, it will be immediately obvious that such variations in implementing the process will alter legal and technical specifics on the commerce.

In one of the embodiments of the Platform based on blockchain mechanisms, the purchasing processes of the system will run as a digital metaverse of smart contracts (bids) issued in form of digital cryptographic tokens which give their holders the right to bid for the target assets.

Such arrangement which will foster and socialize the noosphere of the open community and self-isolated subcommunities of players interested in acquiring luxury goods from selected brands (high-end watches, cars, jewelry, real estate, high-end art, including digital art and digital artefacts, etc.) on one side, and luxury brands owners on the other. The main operational agent for implementing the bidding will be the system-native hybrid digital cryptographic token.

In one of the variations of such embodiment the system will mint a fixed number of tokens by scheduled tranches, based on the latest non-fungible token protocol. Each token will have unique number in order of minting sequence, for example, starting from “000 000 1 and up to “7 777 777”.

While technically non-fungible token, most fraction of the tokens volume will be tradable similar to fungible tokens, except for specially selected tokens having uniquely attractive numbers - like “000 033 3”, “7 777 777”, etc. - which shall be reserved for special events and remunerations.

Nominal value of one token will be equal to the fixed monetary amount equal to one standard electronic bid or electronic stake in a specially formed DAO, e.g. \$10.00. However, lower values of bids are possible, thus one token can be divided in fractions for smaller bids, e.g. \$1.00.

The token will be never burned (never liquidated), as once issued each token is existing for indefinite period of time. When the buyer uses their token for the bid of for buying a stake in specially formed DAO, once the purchase of the target asset related to the bid is complete, the used token goes back to the treasury of the Platform to be sold and circulated for bidding again.

Any buyer can buy multiple electronic bids for their single token if they feel emotionally attached to a particular unique identification number assigned to the token, which presents a non-fungible aspect of a token. In this case, the buyer must prepay future bids/stakes acquisition and keep the token monetary balance positive, otherwise the token will be forfeited to the system and recirculated through ordinary token sale process.

The number of bids is fixed for each target asset. This means that a fixed number of tokens/bids is sold for bidding a particular target asset. Once this number is sold, no further bids are accepted, and the draw is done by proprietary secured unbiased random number generation algorithm to choose the winning token.

In all such blockchain embodiments the system can be run either as separate private blockchain network, or as an advanced private sidechain on top of other existing blockchain networks, e.g., Ethereum. If implemented in a form of a sidechain, the flexible architecture of the system will allow the implementation of smooth and quick migration onto other perspective infrastructural bases in case the efficiency of the main chain will be overtaken by such.

Conventional merits of blockchain technological approaches (such as transparency, reliability, auditability, immutability, low friction costs, etc.) will be fully deployed to reboot and boost conventional merits of conventional online shopping and traditional games of chance through techno-solutions allowing legitimate frequency playing (daily, hourly, etc.), club-style membership, digital asset ownership, and uniquely great chances of winning, along with adequately high house edge margins.

The invention claimed is:

1. An electronic online marketplace where owners of the material assets can list their item for sale through organized raffles administered by the administrator of the marketplace. Users participate in raffles buying online electronic bids issued by the marketplace and providing high probabilities of success compared to traditional games of chance. The selection of the sole winner of the raffle is implemented by the random number selection algorithm provided by the marketplace. The marketplace also provides services guaranteeing fair commerce, such as the sellers and the buyers accreditation, commercial insurance, payment processing, registering transactions and ownership, legal support, tax advising, customer support, logistical services, and other auxiliary services.
1. An electronic marketplace as claimed in Claim 1 that allows the users to form virtual purchasing communities where such users hold stakes and which purchase the items listed for sale and further distribute such items between the stake-holding users by the random number selection algorithm provided by the marketplace.
2. An electronic marketplace as claimed in Claim 1 based on distributed ledger/blockchain technologies that allow users to form Distributed Autonomous Organizations (DAO) or similar electronic communities where such users hold stakes, and which purchase the items listed for sale and further distribute such items between the stake-holding users by the random number selection algorithm provided by the marketplace.
3. An electronic marketplace as claimed in Claim 3 that issues and distributes non-fungible digital tokens as stakes in special purpose formed Distributed Autonomous Organizations (DAO) or similar electronic communities formed by the users in the marketplace.