The Next Big Thing in Monetizing IP: A Natural Progression to Exchange-Traded Units

By Ian D. McClure and James E. Malackowski

The 1990s was the decade of information technology (IT)—a decade where information was important, but the use, disposition, and security of information became paramount. The 2000s was the decade of intellectual property (IP)—a decade where an idea was royal, but exclusive rights to an idea became king. Continuing the natural progression, we currently reside in the decade of intangible assets (IA)—a decade where innovation is the door to success, but monetizing innovation is the key.

The concept of intellectual property monetization is not new. The understanding of that concept, however, is still evolving. Long before the IA, IP, and IT decades, the inception of intellectual property rights resulted from the need to incentivize creation. Indeed, the Greek colony of Sybaris granted exclusive rights to inventions as early as 500 B.C.[1] During the Ming Dynasty in China, sources of pottery were required to mark their products to ensure quality and properly direct complaints.[2] In 1474, a Venetian law specifically provided for patent rights.[3] Of course, our forward-looking Founding Fathers were quite aware of the significance of new ideas in a flourishing economy. The Constitution reserves exclusive rights to authors and inventors to "promote the Progress of Science and the useful Arts . . . ."[4]

The theory, then, is that the ability to realize economic gain is facilitated by the right to exclude others from exploiting the same idea. Rights are granted with the purpose that such exclusivity and control will afford the creator an opportunity to be rewarded for the time, labor, risk, and ingenuity involved in the creative process. But while the right to exclude does not confer a right to monetary gain, it does present an economic incentive to seek such a gain in the hands of a rational and profit-maximizing owner. Therefore, in an efficient world, the right of exclusivity is actually the distinct provision of opportunity for beneficial economic exploitation, endowed to the rights owner for all prospective opportunities to manage an idea.

The opportunity to exploit, however, provides no incentive to create if exploitation is not accessible and does not lead to monetary gain. In other words, the profit motivation is real, but it is also limited by the probability of actually realizing returns. In this equation, we find an inherent friction in the theory that exclusive rights advance the creation process. A lack of outlets for monetizing creation may actually discourage inventive steps, hindering innovation. Importantly, the process of monetizing IP—securing monetary gain by exploiting, through transfer or otherwise, the exclusive rights—typically involves or leads to technology transfer. The allocation of technology to those resources most apt to make efficient use of it is a fundamental building block of any economy. In effect, the transfer of technology leads to more opportunities for innovation. Therefore, the provision of efficient outlets for monetizing IP simultaneously facilitates the transfer of technology and accelerates innovation.

IP monetization has developed slowly since the original Patent Act in 1790. Generally, methods for realizing value from intellectual property have changed as the general mindset with respect to intellectual property has evolved over the IT, IP, and IA decades. An account of these developments is appropriate here.

IP as Deal Breaker

For much of the IT and IP decades, intellectual property was generally treated in an ex post facto manner. In a merger or acquisition, IP due diligence was generally conducted only after the execution of closing schedules or a letter of intent to purchase corporate assets. IP was only considered as part of a legal risk assessment, and not as a value assessment. During these times, IP was not a means to joint venture in the deal setting, but instead became only a "deal breaker" under two common scenarios. IP was either: (1) the 800-pound gorilla in the room that everyone forgot about, or (2) the 800-pound gorilla in the room from which everyone wanted to run. Numerous case studies provide evidence of scenario (1). The most famous of these is the purchase of Rolls-Royce's assets by the Volkswagen AG Corporation in 1998. To the embarrassment of Volkswagen, it was discovered only after the deal had been closed that Volkswagen had failed to purchase the famous Rolls-Royce trademark free and clear of any other interests in the mark. These other interests, which should have been discovered by ex ante IP due diligence efforts, led to the eventual transfer of the trademark to BMW.

Regarding scenario (2), a first-generation M&A mindset was always focused on the identification of risks or encumbrances that may kill the deal. IP was largely misunderstood by the financial community, as it was generally viewed as a bundle of legal rights inviting litigation instead of an independent commercial asset. Because it was misunderstood, it was generally added to the outstanding "liabilities" schedule during diligence. Of course, no issue can kill a deal quicker than a liability that nobody understands. Investment bankers simply avoided the introduction of any unnecessary closing risk into a deal, and if IP could not be avoided, it was a deal breaker. As one IP professional has written about this approach to IP: "In this context, IP diligence should be contrasted with technology diligence, where substantial resources are devoted to analyzing the expected synergies and efficiencies in combining the technologies and associated markets of the target company with those of the acquirer, and those synergies or efficiencies are then translated into, or at least validate, the deal price."[5]

IP as Deal Maker

Eventually, the perception of IP has changed from a bundle of legal rights to an independent and valuable commercial asset. As a result, the treatment of IP has shifted from an ex post facto approach to an ex ante model. IP is slowly being regarded as a

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means to making deals happen. In this respect, the IP market has been infiltrated by numerous service companies that specialize in "IP research"—the mining of IP portfolios for quality IP, the vetting of IP for validity and market potential, and the attribution of a "value" to particularly worthy patents.

Over this time, IP has slowly become the focal asset of many deals; the legal embodiment of many joint ventures. Estimates show that U.S. receipts for the use of intellectual property assets totaled approximately $92 billion in 2002; this compares with rental and leasing receipts for automobiles, machinery, computers, and other equipment of $95.1 billion in 2002.[6] More significantly, however, the mindset of business executives began to change during the IP decade. Specifically, executives began to recognize the qualitative advantages that IP offers in addition to the quantitative benefits. In a 2004 survey conducted by the Licensing Executives Society (LES), executives in the health care, digital information communications and electronics, and industrial markets indicated that stopping imitation and higher profit margins were the most important reasons for developing IP assets. In addition, the same leaders indicated that maximizing licensing revenue was the main motivation for out-licensing IP.[7] By 2006, an *Economist* survey of over 450 industry-leading companies found that nearly seven out of 10 senior executives said their top strategy for accelerating innovation was to increase their collaboration with other companies.[8]

IP as Auctioned Items

It was only a matter of time before a marketplace of some type was formed where IP could be bought and sold. One of the first and most public marketplaces to form was an auction model. The concept of auctioning intellectual property was not completely novel, however. Public auctions had been held for IP in the context of bankruptcy or dissolution of a business. Private auctions had been held for particular IP, in which the seller or a representative invited a selected group of potential buyers to bid on the IP. Still, a public IP auction marketplace had not been created before April 2006, when Chicago-based intellectual property merchant banc Ocean Tomo hosted the world's first live IP auction in San Francisco.

Over the next few years, despite low sales percentages at many of the auctions held, many knowledgeable IP professionals commended the concept and were quick to qualify its shortfalls as conditions of a developing market.[9] The true success of the auctions has been the effect on the emerging market for IP. For the first time, it provided the opportunity to bring sellers and buyers to a common public forum, providing visibility to the marketplace. Maybe even more importantly, the strong interest in creating a central marketplace for IP was clearly, and publicly, exhibited. Many in the IP community agree that, while the auction platform "may not . . . [live] up to some expectations, the strong interest in the concept of public patent auctions . . . signals an emerging trend toward a more liquid, more public and more robust market for patents."[10] Importantly, "the trend is likely to continue."[11]

IP as Brokered Assets

The introduction of the IP auction platform began a rapid growth in the IP services market. As a *New York Times* article pointed out last year, the IP market has experienced "a flurry of new companies and investment groups . . . to buy, sell, broker, license and auction patents."[12] The article went on to add that "[t]he arrival of these new business-minded players . . . could lead to a robust marketplace for patents, where value is determined not so much by court judgments but by buyers and sellers, perhaps, someday, like eBay."[13] Indeed, as one recently presented academic study suggests, such intermediaries "ultimately can contribute to more efficient cumulative creation of innovation through more economical exchange of technologies."[14]

Validating the strong public interest in creating an IP marketplace, in 2009, British interdealer brokerage firm ICAP purchased Ocean Tomo's IP transactions business, including the IP auction business. The marriage between IP and brokerage services was the next step in IP's evolution as a value driver. As a brokered asset, IP began flowing through intermediate channels as independent and valuable articles of trade. Using brokerage firms, the acquisition of IP has grown to become part of business strategy in a knowledge economy. IP was no longer solely a competitive advantage tool ensuring freedom to operate. It was a means to deriving revenue—directly from the IP asset.

IP as a Standard-Setting Instrument

The inherent flexible nature of IP as a nonrivalrous good has led directly to the largest boom in IP monetization: licensing. Through licensing, IP becomes the legal embodiment of collaboration, which allows for an entire industry to adopt a single enabling technology. Significantly, it allows for the IP owner to collect payments for the use of the underlying technology without diluting the owner's equity in the IP. It is this quality of IP that has instigated the burgeoning open innovation concept.

The benefits of licensing are both qualitative and quantitative. According to the Research and Technology Executive Council, "companies have employed out-licensing as a low-capital strategy to commercialize intellectual assets more effectively. Additionally, as companies move out-licensing responsibilities from the legal function to the R&D function, out-licensing has been employed more strategically to generate additional revenues streams, enter adjacent markets, establish industry standards, encourage innovation, and form new partnerships."[15] In addition, using cash flow generation and profit margin as a measure of success, one study reports that 75–80% of all out-licensing deals can be classified as successful.[16]

Exchange-Traded Units

U.S. Internal Revenue Service data show that technology licensing payments increased from $33 billion to $157 billion between 1994 and 2007.[17] Yet, the billions of dollars exchanged through IP transactions have completely accrued

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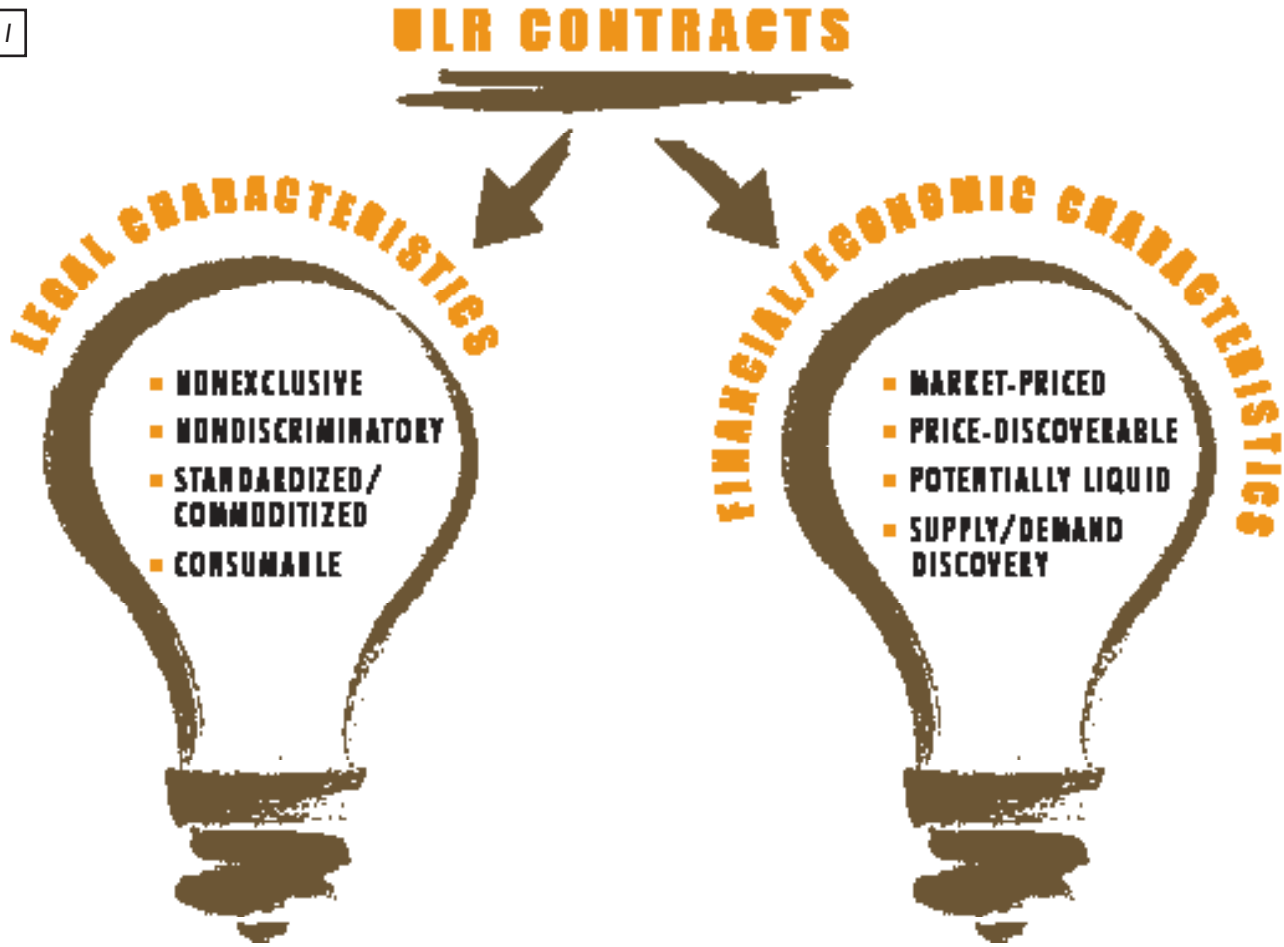
Fig. 1



from private, one-off dealings. Licensing programs typically require a large commitment of internal resources to make licensing an efficient operation. Traditional bilateral licensing includes numerous time-consuming steps, including: (i) identifying IP for license, (ii) examining the value and market potential for the technology, (iii) identifying and locating potential licensees, (iv) determining or defending patent validity, (v) creating prospectus and marketing materials for shopping the IP rights, (vi) separately negotiating each license through one-off transactions, and (vii) policing consumption and auditing royalties to ensure compliance.

The IP transaction market needs two essentials: transparency and efficiency. Every healthy market must offer a medium through which each of these crucial elements can be achieved. For the IP market, that medium is the next big thing in IP monetization: the Intellectual Property Exchange International (IPXI), the world's first financial exchange focused on intellectual property rights.

The need for an efficient and transparent marketplace for the exchange of IP rights has been addressed in academia for years. In 2007, Stanford IP professor and scholar Mark Lemley teamed with a former chief technology officer at Microsoft, Nathan Myhrvold, to publish a working paper titled "How to Make a Patent Market."[18] Governments have entered the discussion as well. This year, the European Commission extended a tender offer for service contracts to study and report on the feasibility of a market for IP rights.[19]

IPXI aims to offer an efficient platform for the trading of intellectual property rights while providing market-based pricing and price discovery. In March 2010, corporate executives from various industry-leading companies gathered in Dallas to offer input and set guidelines for an intellectual property marketplace rulebook. IPXI spearheaded the gathering in order to set approved standards for the Unit License Right™ (ULR) contract, a commoditized nonexclusive patent license that is revolutionizing the transfer of technology. Each ULR contract purchased gives the buyer a right to use a pre-established unit of IP; for example, the right to make and sell up to an established quantity of products covered by the patents in question. The ULR contract is the first exchange-traded license product created, and aims to be the most efficient instrument for the transfer of technology ever used.

The ULR Rulebook sets out to govern the exchange of technology in a nondiscriminatory manner via standard form licenses on publicly disclosed terms. The ULR contract model resembles the open market elements of a stock market or commodities exchange. In this light, ULR contracts address the current inefficiency of technology transfer, including the time, expense, redundancy, and uncertain outcome of traditional bilateral license negotiations.

Other characteristics of the ULR contract marketplace simulate an open market for tangible goods. Initial pricing of ULR contracts is dependent upon, among other things, public comment, demand, and anticipated technology adoption. Important to any thriving and liquid market, a ULR contract secondary market will be developed wherein previously purchased but unconsumed units can be resold. IPXI contemplates that ULR contract futures and derivative products also will be developed.

The emphasis of the ULR contract marketplace is simple: price and technology adoption are market-driven. Added transparency allows corporate senior management to make more accurate R&D and asset management decisions. A more balanced playing field is created by market characteristics that allow buyers to purchase units of technology on an as-needed basis at market-driven prices. As a result, the market for technology becomes more accessible to small and medium-sized entities, accelerating technology adoption. Accelerated adoption could increase demand for the underlying IP rights, maximizing revenues to the IP owner.

As stated by one leading European economist and expert in the economics of innovation, exclusive rights in IP "allow[] the organization of market exchanges of 'exploitation rights,' which, by assigning pecuniary value to commercially exploitable ideas, creates economic incentives for people to go on creating new ones, as well as finding new applications for old ones."[22] IPXI has taken this concept to a reality.

Allow Time for Growth

The first few years of the ULR contract market will undoubtedly be a work-in-progress. Industry buy-in and adoption are expected to be slow due to protracted corporate approval processes and the natural corporate disinclination to change. But the market will launch, and the market should grow as the psychology shifts.

The inception of nearly every exchange or exchange-traded contract has met the friction of naysayers, competition, and, importantly, a lack of trading volume. Commodities contracts have notoriously experienced a slow ramp in trading volume. CO_2 emissions is an example of such slow growth in voluntary commodities trading, which commenced on the Chicago Climate Exchange with very little trading. After 311 contracts were traded during the first month after launch, the exchange was nearly silent for a year as a result of slow adoption (see fig. 2 on page 35).

After the initial period of hesitancy by the market, larger participating companies led the way in adopting the exchange model. The psychology eventually shifted and voluntary trading volume grew exponentially over the next five years (see fig. 3 on page 36).

Other commodities' trading volume historicals prove that trading volumes are generally slow to develop before consistent trading success is experienced. As one study has asserted, "most [contracts] have failed at launch and many started with scant volume before becoming successful."[23] The most heavily traded commodity contract today—crude oil—began trading at the NYMEX in 1983 with only 1,000 contracts a day during its first year. On April 14, 2010, NYMEX set a record for crude oil trading with 1.42 million crude oil contracts traded in one day.[24]

Exchanges themselves are no different. Consider the following exchange-related facts, which provide a testament to the natural growth period that must be allowed for any

Fig. 2

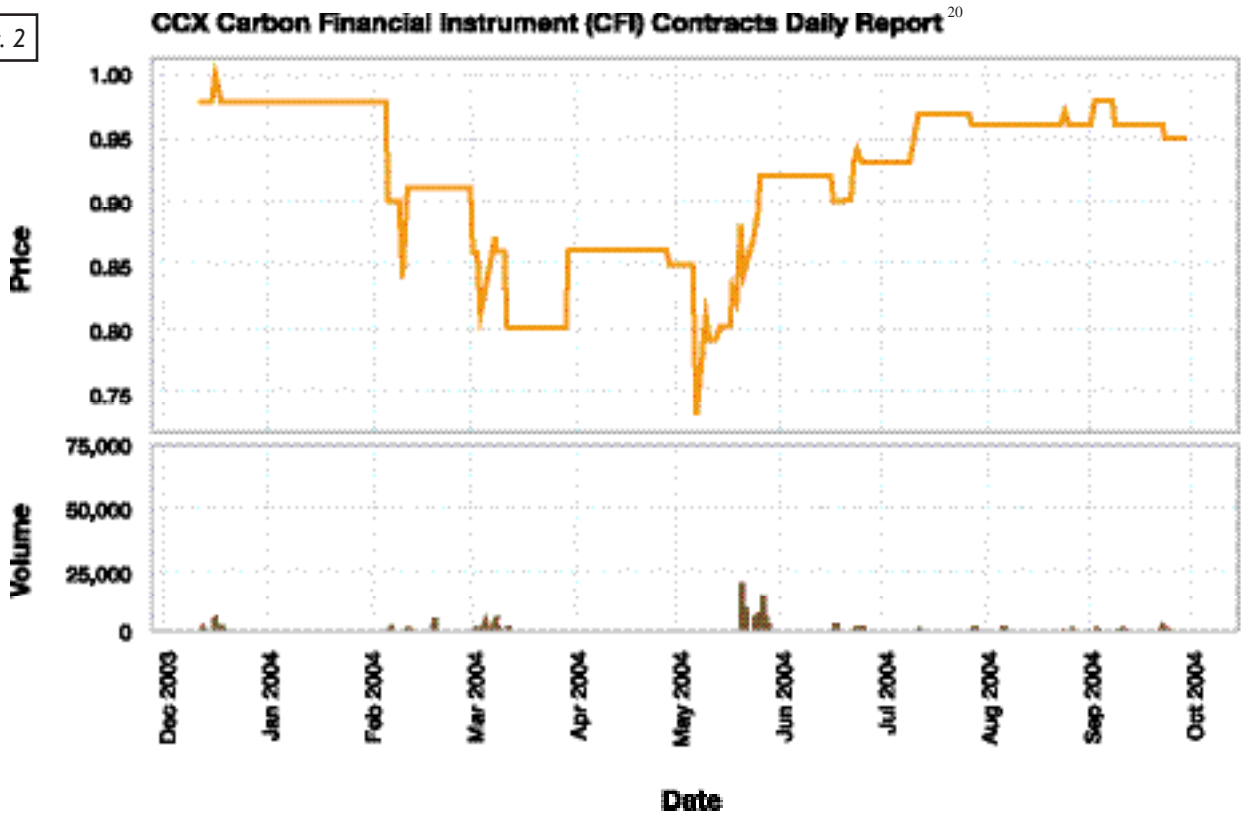
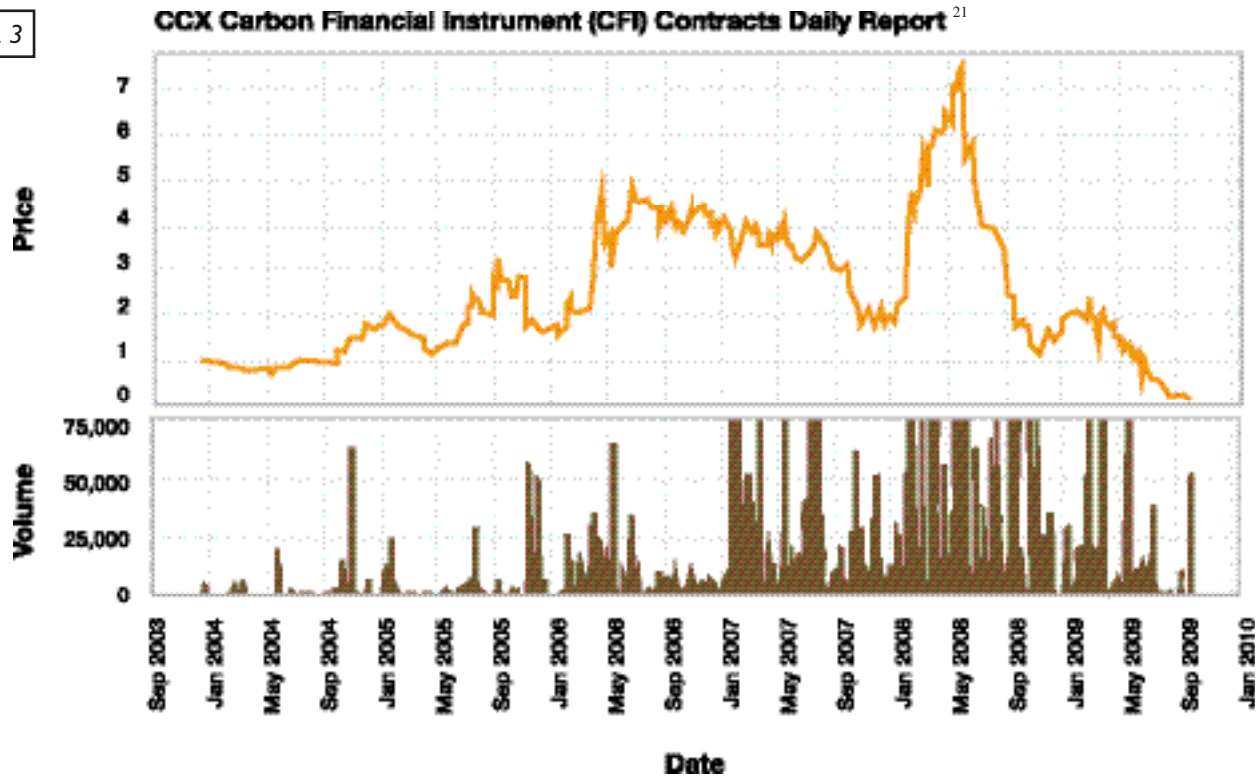


Fig. 3



exchange to reach its potential trading volume:

- In 1970, 13 million futures contracts were traded at the Chicago Mercantile Exchange. In 2002, that number had risen to 558 million.[25]
- In 1982, the first year that options traded (on T-bond futures at the Chicago Board of Trade), only 177,350 options contracts were traded. By 1985, that number reached 20 million. In 1990, 64 million contracts were traded, and in 2002, the amount of contracts traded reached 114 million.[26]
- On April 26, 1973, the first day of trading, the Chicago Board of Options Exchange (CBOE) sees 911 contracts traded on 16 underlying stocks. On September 18, 2008, CBOE experiences the busiest single day in its history as 9,975,464 contracts trade.[27]

Although the growth of IPXI will begin slowly, the overwhelming private and public interest in and support for an IP exchange will push IP monetization into the most efficient platform available—a robust exchange-traded model. After a three-year product development phase, IPXI will launch in 2011, making the transfer of technology a more efficient and transparent process. Importantly, the incentive to create instilled by the Copyright Clause of the Constitution may now, more than ever, be effective. ■

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