

## Evolution of the Crypto Asset Wonderland: Alice and Beyond

(Note: in keeping with the phrasing used in a bill submitted to the Diet on March 15, 2019, the term "crypto-asset" (CA) will be used herein to refer to a "virtual currency" (VC) or "cryptocurrency", unless referring to a law or organization using the latter terms.)

Japan appears to have placed its confidence in a future in which blockchain technology (Distributed Ledger Technology (DLT)) competes with established currencies as a means for settling debts and making purchases. Indeed, over 10,000 Japanese companies, including several large electronics stores (i.e., the electronics superstore Bic Camera, Inc. and Line Corporation) have recently decided to allow some financial transactions to be conducted using bitcoin and other crypto-assets.

In March 2017, the Standards Advisory Council (SAC) recommended that the Accounting Standards Board of Japan (ASBJ) establish guidelines in order to properly audit and regulate exchanges dealing with crypto-assets. Crypto-assets are defined as having a proprietary value which is transferred using a computer system for use in payment or exchange with other crypto-assets. Crypto-assets are not deemed to be equivalent to Japanese currency or an established foreign currency, as well as not being monies contained in prepaid cards or "bonus" point systems for returning to a customer a percent of monies spent by the customer. Additionally, it was established that crypto-assets amounted to assets which could be subject to taxation (if sold and/or converted to cash) and are not considered to be financial assets, inventories held for trading, or intangible assets.

In April 2017, Japan enacted the Virtual Currency Act which while not declaring crypto-assets to be legal tender, did provide the Japan Financial Services Authority (JFSA) with the right to regulate such currencies. Additionally, certain tax

regulations were repealed so that foreign investors would be able to purchase bitcoin from Japanese financial exchanges. In addition, in late 2017, GMO Internet Group announced that it would offer to pay employees in bitcoin should they opt in.

The buying and selling of coins or tokens constitutes a regulated activity of securities (either as bonds and shares, or as interests in a partnership or an investment strategy). As such, the buying and selling of coins or tokens (hereinafter, simply referred to as "coins") constitutes an activity to be controlled by Japanese securities regulations.

As such there are two systems in place in Japan for regulating this new form of commerce.

If the coins are deemed to provide the owner with a controlling stake or equity or interest in a company, firm, or entity, the coin is deemed to be a security and hence would be subject to Japanese securities regulations. The same is true if the coins are deemed to be held in expectation of repayment of the full, partial or in excess of the initial cost the coins (including interest). The same is also true if the coins are deemed to be contributions to a business by an investor who might receive disbursements of profits from the business in the future.

In other cases, the coin will be subject to regulation by the JFSA as a crypto-asset if the coin is deemed to have a proprietary value which can be used by anyone to obtain goods and services, but which can only be used and recorded electronically in a ledger, or can be exchanged for a form deemed to be a security (shares, equity, interest, etc).

Individuals, groups and companies which offer to act as agents in the buying, selling, and/or storing of crypto-assets in Japan must be registered with the JFSA as a Virtual Currency Exchange Operator (VCEO). In addition to adhering to strict policies regarding data protection, all VCEOs must meet certain financial and residency regulations.

While all of these signs point to a future for bitcoin

and potentially other crypto-assets in Japan, the road leading to the current situation has been bumpy and continues to be filled with potential problems, ranging from those which are merely potholes to those which are pits.

Other countries have not been as welcoming of the new technology and have taken steps ranging from issuing warnings regarding crypto-assets, severely restricting the use thereof, or completely banning the use thereof. China has banned almost all financial transactions using crypto-assets, although the People's Bank of China has begun to develop a crypto-asset potentially for limited and heavily-regulated use. While generally discouraging investment in crypto-assets, South Korea has taken steps to allow transactions using crypto-assets so long as they are not anonymous, which is one aspect of crypto-assets that appeals to many investors. Some countries such as Switzerland have issued guidelines (which vary depending on the type of token and the usage thereof) regarding anti-money laundering and data protection regulations relating to DLT, or have called for thorough regulation and supervision of crypto-asset exchanges such as in the case of the UK. The UK has one organization, CryptoUK, in which the crypto-asset industry polices itself and establishes its own operational rules. This is more than likely a first step in the development of a broader, independent organization (or set of organizations) to instill a more comprehensive set of standards.

There are numerous crypto-assets operating in the US covering a wide array of industries, platforms, etc., and to date, little in the way of oversight, standardization, or monitoring led by the crypto-asset industry itself. There has yet to be a significant hacking such as with Coincheck or other slap to the face of a US-based crypto-asset, however various agencies, such as the Security and Exchange Commission (SEC) has deemed that the some measures are necessary in order to avoid the disruptions and problems seen elsewhere where regulations and consumer protections were lacking.

Malta has begun to draft legislation directed to verification of the reliability of an Initial Coin Offering (ICO) and the provisions by which an ICO will be judged to be an asset or a financial instrument. Similar legislation is pending in the United States regarding whether crypto-assets are securities and therefore subject to the laws and regulations under the Securities Act and the Securities Exchange Act. Israel has passed legislation with regards to how profits from ICOs and DLT are to be taxed. The Supreme Court of India stated in November 2017 that crypto-assets exist as something other than currency or commodities and would eventually be subject to regulations, and in December 2017, the Reserve Bank of India again stated that those investing in crypto-assets do so at their own risk, and in early 2018, followed this up by barring the banks under its jurisdiction from engaging in crypto-asset operations.

While some regulations and regulatory agencies have been established, both Japanese banking and security exchanges and the Japanese government seem more willing to rush into the whirlpool of crypto-assets than other countries despite Japan's usually conservative wait-and-see approach when it comes to investment, particularly when such investment is seen as highly volatile. Given the desire to find ways out of the economic stagnation that has burdened Japan since the bubble burst, promoting and investing in crypto-assets may offer a new tax revenue stream from both investors and corporations. Currently, the tax rate on earnings obtained through crypto-asset trading ranges from 15% at the low end to 55% at the high end applied in the case when annual earnings are in excess of 40,000,000 yen (\$376,852; based on 108 yen = \$1, rate as of January 2020).

One of the earliest bitcoin exchange corporations, Mt. Gox went under in early 2014 after over \$420 million (approximately 46.6 billion yen at that time) worth of bitcoins disappeared from their accounts and customer's accounts. Despite promises of reimbursement, no settlements have been reached and investors have been unable to recoup their losses

as a result of this hack.

More recently, Coincheck announced that it would attempt to reimburse customers over 46.3 billion yen (\$429 million) after their network was hacked and over 58 billion yen worth (\$537 million) of NEM crypto-assets was stolen. Thereafter, the JFSA warned other Japanese crypto-asset firms to take steps against such hacking attempts in the future.

As of December 2017, there were fifteen crypto-asset exchanges which had received approval to operate from the JSFA. These exchanges are allowed to operate so long as the crypto-assets they handle meet strict standards, and while most of these exchanges are limited to trading bitcoin only, one (Xtheta Corp) has been allowed to trade at least eight other crypto-assets.

However, in early March 2018, the JFSA ordered two crypto-asset exchanges (Bitstation and FSHO) to cease operations for one month due to compliance issues and misappropriation of data/information. The JFSA found that highly suspicious transactions at FSHO were routinely unreported to regulators. Five other exchanges were given warnings to improve their business practices or risk the same fate. Another 16 or so exchanges have been permitted to operate while their applications for registration are under review with the JFSA.

The JFSA along with academic and industry experts has also begun to examine the establishment of regulations in regards to margin requirements and the maximum leverage that will be permitted, so that investors caught up in a whirlwind of investment do not overextend themselves. In June 2018, the Japan Fair Trade Commission (JFTC) deemed that six coin exchanges were operating without the management structure necessary for proper regulatory compliance and ordered that these exchanges be tightly controlled and monitored by the JFSA until such a time that they are deemed to be in compliance.

In October 2018, the Japan Virtual Currency Exchange Association (JVCEA) was given accreditation and permitted to

operate a set of organized and self-regulating crypto-asset exchanges (at present the 16 exchanges licensed to operate). The JVCEA will authorize the introduction of new crypto-assets, and numerous regulations were established. Among these regulations are those which mandate all exchanges to establish a ceiling on the amount of crypto-assets that may be managed and the manner in which keys are stored. The exchanges must avoid insider trading and maintain no more than a 4:1 leverage level.

In 2019, a large scale review of these coin exchange operators will be conducted by the Financial Action Task Force (FATF). New restrictions, legislation and/or continuous regulatory oversight may be required to bring the coin exchange operators into compliance depending on the results of the review.

#### Blockchain Patentability

Two cases adjudicated by the US Court of Appeals for the Federal Circuit have set the manner and tone by which software patent applications are to be judged in the post-Alice world.

- 1) *Ultramercial v. Hulu* No. 10-1544 (Fed. Cir. 2014)

The patent in question was deemed to merely be software executed on a computer (displaying an advertisement prior to providing content) and thus, is deemed to be an unpatentable abstract concept. An advertisement may be considered to be "currency" or "asset" in this case.

- 2) *DDR Holdings v. Hotels.com* 13-1505 (Fed. Cir. 2014)

The patent in question is directed to an invention which improves the manner in which a computer functions. The invention provides a means for solving problems existing in the field of computers and computer networks and not limited to an abstract concept, the invention was deemed to be patentable.

These cases and the ensuing avalanche of invalidations of patents merely associated with an abstract software concept seem to suggest that a blockchain-related invention which does

not improve or advance the manner in which a computer or a computer network functions would be barred from receiving a patent by Alice. Accordingly, new blockchain programs will have to be designed as inventions improving prior programs.

Blockchain technology has and will also be used for the storage and distribution of content (i.e., music and other media subject to copyright protection) stored in an immutable ledger. The positives of this system is that royalties can be more easily distributed to the artist, author, licensee, etc., of the media selected for viewing or purchase by a user and speed the distribution of such content and of updated content to users.

Infringing content may not be so easy to remove from a ledger, as the ledger is in itself largely immutable, however steps can be taken to block a user from seeing content stored in a ledger in violation of copyright or licensing agreements. This becomes even more complicated if the DLT is public, as content can be uploaded by nearly anyone.

Alice and the above Federal Circuit Appeals decisions have not hindered all applications related to blockchain technology from being filed at patent offices worldwide, particularly the USPTO. While many of the large banks, not only in the United States, but worldwide, seem interested in the demise of blockchain-based currencies in favor of the traditional and comparatively stable fiat currencies, many of these banks (i.e., Goldman Sachs and Bank of America) have filed numerous applications related to blockchain technology. Citi (formerly Citibank) has begun internal testing of "Citicoins" and Mitsubishi UFJ Financial Group has scheduled the issuance of the "MUFG coin" and the establishment of a MUFG coin exchange in April 2018.

Mitsubishi UFJ Financial Group has expressed the intention of preventing wild fluctuations in the price of their MUFG coin order to provide stability. The plan is to offer the MUFG coin at a cost of 1 yen per 1 coin, although the coin will

be permitted to float. Given that no one can predict with certainty whether a crypto-asset will establish itself (or whether numerous crypto-assets will establish themselves, etc) as a currency accepted worldwide or whether crypto-assets will ultimately prove to be too unstable and prone to abuses such as hacking and a lack of oversight, and finally find itself unceremoniously tossed in the refuse bin, these banks seem to be adopting the Boy Scout philosophy of "Be prepared".

While referring to the recent advent of crypto-assets and wild fluctuations in price per "coin" as "the wild west" is already a tired cliché, there are obvious reasons for regulating or at least making sure that investors (re: casual investors caught up in the dream of making a bundle quickly) are protected from the dangers associated with crypto-assets. Aside from the risk of hacking, governments see salivating investors who blindly envision their crypto-asset investments as being an endless skyrocket to financial freedom, as reminiscent of the roaring twenties which culminated in the collapse of Wall Street and subsequent world-wide depression. While numerous other factors (re: Smoot-Hawley, etc) came into play which deepened the chasm left by the stock market collapse and eventual margin calls, most governments and people desire to see their stock exchanges operating in a steady and predictable manner (as much as a financial market can ever be considered steady and predictable).