

VALUATION
Of the
MARKET VALUE
Of
CARD ACTIVATION TECHNOLOGY'S
Method of
PROCESSING DEBIT PURCHASES
Including
U.S. PATENT 6032859

As of July 31, 2007

CHAPIN ASSOCIATES LTD.
2441 FOX MEADOW COURT
NORTHFIELD, IL 60093-4305

August 21, 2007

Mr. William P. Williams, CEO
CARD ACTIVATION TECHNOLOGIES, INC.
33 West Jackson Blvd., Suite 1618
Chicago, IL 60604-3749

Dear Mr. Williams:

CHAPIN Associates Ltd. has performed a valuation using a comparable royalty rate approach to provide an indication of market value for CARD ACTIVATION TECHNOLOGIES'S method for processing debit purchase transactions using a counter-top terminal system, including Patent Number 6,032,859.

The results of our engagement are detailed in this report, which is to be used solely for the purpose described herein. A valuation as of a different date of value or for a different purpose could result in a materially different conclusion.

We have performed this engagement following professional guidelines and in a professional manner in accordance with recognized industry practices. We make no further warranty, expressed or implied.

Respectfully submitted,

CHAPIN Associates Ltd.

I. ENGAGEMENT SUMMARY

Report Summarized: The valuation report contained herein is issued as of July 31, 2007 by *CHAPIN Associates Ltd.* This report is subject to the Assumptions and Limiting Conditions included herein.

Subject of Valuation: Estimated market value of the asset included in Patent Number 6,032,859.

Asset Description: Method for processing debit purchase transactions using a counter-top terminal system.

Purpose of Valuation: This valuation will be used solely to estimate the market value of the subject asset for potential market transactions.

Valuation Approach: Market

Valuation Method: Discounted Future Benefit Stream based on Market Comparable licenses (royalty rates).

Standard of Value: Market Value

Date of Value: July 31, 2007

Value: \$ 3,732,096,059

II. DESCRIPTION OF THE ASSET

There are several types of property which may be owned and controlled. Real property and personal property are generally understood. The extent of ownership in these types of property is defined by the physical asset, and/or by a written description. Both of these types of property are tangible.

A third type of property is Intellectual Property. It is generally less tangible than the other types of property. However, in modern times, the value and importance of property which is developed and protected through intellectual means becomes more critical to technology oriented societies, such as we have in the United States.

Intellectual Property, and in particular patents, are described almost entirely in words. The actual nature and extent of the asset is created and maintained by the document itself.

There is a tendency and temptation on the part of laypersons to somehow paraphrase and simplify the meaning and therefore the scope of a patent document. The result can often be misleading.

Instead, the “claims” section of the patent properly sets out the scope of protection.

The patent document itself is carefully prepared by patents experts. It is examined and granted by patent experts in the United States Government. The patent is by law, presumed to be valid after the actual grant of the patent.

The most reliable means of understanding the scope of protection afforded by a patent is to understand the Patent document itself.

Therefore, the patent document itself, which is the subject of this valuation, is attached hereto. (See attached patent document for U.S. Patent 603259.)

III. DESCRIPTION OF THE MARKET

The adoption of electronic instruments that are able to access sophisticated and extensive networks to authorize, process, and settle payments with relative ease continues to increase. In 2006 the total number of electronic transactions made in the United States, which accounts for around 55 percent of non-cash transactions, had surpassed the number of check payments, which accounts for around 45 percent of non-cash transactions (Federal Reserve System, 2004).

U.S. consumers used checks for 11 percent of their in-store purchases, and used payment cards for 56 percent of their in-store purchases in 2005 (American Bankers Association and Dove Consulting, 2005). However, considering a longer time horizon, Humphrey (2004) estimates that U.S. legal cash usage as a share of consumer payments fell from 31

percent in 1974 to 27 percent in 2000. He attributes the decrease in cash payments to greater usage of payment cards, mainly credit and debit cards.

For the most part, existing payment mechanisms, such as cash, check, credit cards, and debit cards seem to be preferred by consumers and merchants over general-purpose prepaid cards. There have been several applications of retailer specific prepaid cards that have been successful

While the market for prepaid cards is still emerging, certain prepaid applications are growing rapidly. According to HSN Consultants Inc. (1999-2005), the value of prepaid card purchases increased from \$30.31 billion in 1999 to \$115.78 billion in 2004. This growth of prepaid applications exceeded prior projections.

In the United States, applications of general purpose prepaid cards in which the purchaser or the disburser of funds is different from the ultimate consumer of goods and services are growing rapidly. In 2006 retailer specific gift cards accounted for the greatest number of transactions of any prepaid card application. The National Retail Federation (NRF) estimates that there were \$48 billion in retailer issued gift card sales in 2004 (eFunds Corporation, 2005). Gift Card recipients spend as much as 40 percent more than the value of the card (Alexander 2005).

A 2006 survey showed that nearly 80 percent of Americans would rather receive a card to their favorite retailer than other kind of gift. The research also showed that 91 percent of adults who had received holiday gift cards had redeemed them before the end of February. The survey conducted by Comdata's Stored Value Systems found that 76 percent of adults purchased gift cards in the 2005 holiday season.

General purpose gift cards enable recipients to buy goods and services from a greater number of merchants than retailer specific cards. The NRF estimates that general purpose gift card sales totaled \$5 billion in 2004 (eFunds Corporation 2005).

Another Comdata survey (2006) found that a stunning 95 percent of adults have either received or purchased a gift card, compared to 75 percent in 2005. The two most popular occasions for gift card purchases are still birthdays and the winter holidays. Adult purchasers load each gift card they purchase with an average of \$46 – up 21 percent versus the average load in 2003.

A new study has found that more consumers prefer debit cards than any other type of payment for point of sale purchases. This is the first time in study's history that debit cards exceeded all other payment devices as the overall preferred payment product. "Payment Dynamics 2007 Preferred Payments Study" from TransUnion and Edgar, Dunn & Company found that 29 percent of respondents prefer debit cards versus 26 percent for credit cards.

More businesses are issuing debit cards to their employees for travel expenses. The benefit to the employee is freedom of choice in determining how and where travel

expenses are utilized and the benefit to the employer is in insuring a strict travel budget is enforced.

More organizations are now presenting gift cards as an honorarium rather than the traditional can of popcorn or tin of cookies.

It is clear that debit cards and gift cards, both general purpose and retailer specific, are becoming more popular. It has been suggested that 95 percent of adults have used some type of debit card, gift card, or other stored value instrument. According to projections by Deloitte & Touche, more than two-thirds of U. S. shoppers bought nearly five gift cards on average this past holiday season. Sales of these prepaid products, along with cash cards, prepaid phone cards and other stored value instruments, are projected to increase from \$109 billion today to \$132 billion in 2008.

However, the cards that would come to dominate the industry were not smart cards, which keep information stored in microchips embedded in the cards, but the magnetic stripe cards, which link to networks when consumers conduct transactions. Newer technology utilizes radio frequency such as in the proximity cards.

The patent which is the subject of this report is capable of accommodating all current technologies: smart cards, magnetic stripe cards, and optical character recognition (OCR), and bar codes. The market segments covered by this patent in this report include prepaid phone cards, gift cards and other stored value instruments, gift card processors, and bank debit cards.

Prepaid Phone Cards

Invented for the convenience of their users, prepaid phone cards or calling cards are widely used today as an inexpensive alternative to “landlines,” or home telephone services. Long distance phone service has been an incredibly competitive market, but not everyone wants to pay to have full-time long distance service in their home or business. This is where the phone card serves. One of the big advantages to prepaid calling card is that you only pay for the minutes used.

Prepaid calling cards are so popular that some companies even supply them to their employees as a company benefit, or to provide employees with calling cards to use while traveling for business. Doing this provides benefits not only to employees, but the company as well, as spending can be tracked easily, and a record tracking the calls made by the phone card user is readily available.

The ATLANTIC – ACM Study (2003) predicted that the prepaid calling card industry would reach \$6.4 billion by 2008. In a current study, iDPhoneCard.com expects the calling card industry to reach \$10 billion in sales by the year 2010.

Gift Cards and Prepaid Debit Cards

A study by the Federal Reserve Bank of Philadelphia in March 2007 indicated that prepaid cards accounted for \$181.7 billion in transactions in 2006, and is one of the fastest growing payment products. Prepaid cards are among the newest payment card innovations. They are distinguished by a pay early model. The most well known and successful version of this product is retail gift cards.

Gift Card Processors

This category is obviously linked to the use of gift cards, prepaid debit cards, and other stored value instruments. It represents the processing of commercial transactions where a prepaid debit card is used as a payment vehicle.

Bank Debit Cards

According to a 2007 study, Debt Issuers Survey (Dove Consulting), bank debit card volume increased by 18% in 2006 and a similar rise is expected in 2007. The Nilson Report (2005) had debit cards ending the year with 19.7 billion transactions, 600 million more than the 19.1 billion credit card transactions. Market share was 51% for debit cards and 49% for credit cards (based on volume) according to the report.

The Nilson Report also reported that that the average transaction using a debit card was \$37 while the average transaction using a credit card was \$84. While the use of debit cards has overtaken the use of credit cards, the use of credit cards are still preferred for larger (dollar amount) transactions.

IV. DESCRIPTION OF THE METHODOLOGY UTILIZED

The value of an asset is its ability to generate revenue or to provide to its owner(s) some sort of competitive advantage that can be quantified in economic terms. Further, it is not as important as to how the asset performed in the past in meeting these characteristics, but how it will perform in the future.

The years in which the present asset is employed witness tremendous growth. For most of that period the industry experienced 50 percent growth rate per annum. In the last year or so, while the growth is still substantial at 18 to 20 percent, it is beginning to taper off. This tapering off of the industry suggests stabilization. A stabilized revenue stream is a condition that lends itself to using a discounted cash flow approach to value.

First we start by determining the potential revenue to be generated from the patent. We then determine an appropriate growth rate to apply to this revenue stream, and apply that growth rate for the next seven years. We use seven years because that is the remaining legal life of the patent. We determine market share for each of the seven years and apply

a royalty to this revenue stream. The royalty income for the seven year period is then discounted to its net present value to arrive at a value for each market segment.

The discount rate is determined using the build up method. It represents a risk adjusted rate of return available to investors in the market. The components include: a risk free rate of return represented by an investment in a long term treasury vehicle; an equity risk premium representing the premium return an investor expects for investing in an equity position; an industry risk premium representing an additional return for an investment in this industry; and finally a premium representing functional obsolescence.

Technological obsolescence refers to the age of the technology. An older technology is more likely to be replaced by new and innovative technology.

The subject patent has seven years remaining in its legal life. New technologies are coming into use, such as the proximity cards which use various forms of radio waves to communicate with the point-of-sale terminal. This technology has yet to achieve market acceptance, but it is on the horizon.

Therefore we have included a 6.3% premium to the discount rate to account for this functional obsolescence.

The phone cards, gift card cards and prepaid debit cards analysis focuses on the product itself and utilizes a 1.5% royalty rate. This rate is approximately one-half the rate applied to credit cards.

The gift card processors and bank debit cards analysis concentrates on the processing of transactions using these payment vehicles. Therefore determining the average transaction and the cost of processing that transaction is an important component of the analysis.

The cost to process each transaction is \$0.10 - \$0.60; the average cost to process is \$0.30. The average transaction size for gift cards is \$46.00 and the average transaction size for bank debit cards is \$37.00.

The royalty rate to apply against processing revenue has been determined to be 5%. Exhibit V attached hereto lists twenty guideline licenses that are used as comparable to the subject patent. Guideline or comparable technology is not expected to be an exact replica of the subject. Rather, guideline licenses should reflect similarities in the technologies and similarities in how they are employed.

V. RESULTS

BUILD-UP DISCOUNT RATE

Risk-Free Rate of Return	5.0%
Equity Risk Premium	7.1%
Industry Risk Premium	1.1%
Functional Obsolescence	<u>6.3%</u>
Discount Rate	19.5%

SBBI – Ibbotson Associates, Inc
Chicago, Data Year – 2006
Industry – Computer Processing and Data Preparation

Exhibit I provides the analysis for Phone Cards with a value conclusion of \$132,297,007.

Exhibit II provides the analysis for Gift Cards and Prepaid Debit Cards with a value conclusion of \$3,449,989,387.

Exhibit III provides the analysis for Gift Card Processors with a value conclusion of \$74,999,769.

Exhibit IV provides the analysis for Bank Debit Cards with a value conclusion of \$74,809,896.

The total value for these market segments is \$3,732,096,059.

VI. DOCUMENTS RELIED UPON

- United States Patent Number 6,032859
- Royalty Source Intellectual Property Database
- Card Activation Technology, Inc. Royalty Rate Factors and Supporting Studies, Navigant, 2006
- The Nilson Report, September 2006
- “Is a Gift Right for You?” Federal Reserve Bank of New York, February 2006.
- “Selling Prepaid,” Intele-Card News, March 2007
- “Stored Value Cards: Challenges and Opportunities for Reaching Emerging Markets,” The Center for Financial Services Innovation April 2005
- “Debit & Women,” www.cardtrak.com, June 2007
- “Gift Cards: Purchased/Received,” www.cardtrak.com, November 2006
- “Prepaid Cards,” www.cardtrak.com, July 2006
- “Gift Cards – Holiday Sales,” www.cardtrak.com, June 2007
- “Wallet Share – Payment Preference,” www.cardtrak.com, April 2007.
- “Gift Card Usage,” www.cardtrak.com, October 2006

- “Holiday Sales – Carded Holiday Retail Sales,” www.cardtrak.com, November 2006
- “New Year, New Season, New Strategies,” Transaction Trends, January 2007.
- “Gift Cards Make Sense for Small Business,” Rhonda Abrams, USA TODAY, May 20, 2007.
- “Holiday Shopping 2005: ‘tis the Season for Giving,” www.Deloitte.com/dtt/press_release, November 2005.
- “Gift Cards 2005: Many Good Retail Cards. Any Good Bank Cards?” Sherrie L. W. Rhine, Federal Reserve Bank of New York, December 2005.
- “U.S. Prepaid Calling Card Industry to Reach \$6.4 Billion by 2008, ATLANTIC-ACM Study Reveals,” Goliath, February 2003.
- “Prepaid Market Forecasts 2006 – 2009,” Research Report by Mercator Advisory Group, December 2006.
- “Supply and Demand Side Developments Influencing Growth in the Debit Market,” Julia S. Cheny, Federal Reserve Bank of Philadelphia, October 2006.
- “General Use Prepaid Cards: The Path to Gaining Mainstream Acceptance,” James McGrath, Federal Reserve Bank of Philadelphia, March 2007
- “Prepaid Cards: Not Just for Gifts Anymore,” The Green Sheet, January 2005.
- “InComm Delighted with Gift Card Boom,” Patti Bond, Cox News Service, December 2006.
- “New Comprehensive PULSE Debit Industry Study Reveals Continued Growth in Debit Card Market,” PULSE New Release, February 2007.
- “Payment Instrument Choice: The Case of Prepaid Cards,” Sujit Chakravorti and Victor Lubasi, Federal Reserve Bank of Chicago, August 2006.
- “Why Use a Prepaid Calling Card?” iDPhoneCard.com
- “Debit Card Volume Passes Credit Card,” netbanker, November 2005.

VII. ASSUMPTIONS AND LIMITING CONDITIONS

We have included a Statement of Assumptions and Limiting Conditions as required by the Business Valuation Standards of the American Society of Appraisers. These assumptions and limiting conditions are an integral part of this report and communicate our dependence on information obtained from management and public information sources, the proper use of this report, and other limitations on the scope of this engagement.

1. Each intellectual property or bundled group of IP assets being valued relates to a single product, product line, or product feature and attendant implied options present in any product.
2. The highest and best use of the technology has been properly identified and the ability to realize that value, either independently, or through appropriate collaborative or assignment mechanisms, exists.

3. The collective wisdom of the world's stock markets, or a portion thereof, is a generally more accurate and responsive determiner of value than individual subject matter experts.
4. The legal rights underlying the intangible assets were crafted with usual degree of professionalism, and the rights were issued following due diligence by the appropriate authorities.
5. Unless otherwise noted, this valuation assumes 100% ownership of the asset and unrestricted use thereof. We further assume that information provided by the client or its representatives about these issues is accurate and true.
6. Our valuation services constitute neither an audit nor a verification of the Company's underlying financial records pertaining to the asset. We do not render legal, tax, or accounting advice. Our services relate solely to the opinion of value of the intellectual property described herein.
7. We have relied, without independent verification, on the accuracy, completeness, and fairness of all financial and other information that were publicly available, or furnished to us by the management and their accountants and legal counsel.
8. The conclusions are based on the assumption that the intellectual property's owners would continue to maintain the character and integrity of the intellectual property through any sale, reorganization or diminution of the owner's participation.
9. If, after the valuation report is issued, *CHAPIN Associates Ltd.* becomes aware of any information concerning the intellectual property that would, in our opinion materially change the opinion of value as of the date of the valuation, then we have the option, but not the obligation, to notify the client (and other known recipients of the report) that the report is withdrawn and should not be relied upon.
10. Events subsequent to the valuation date may alter our conclusion of value. *CHAPIN Associates Ltd.* will not be responsible for updating our report as a result of these events occurring subsequent to the valuation date.
11. This report has considered all the information referenced in it, whether specifically mentioned in the report or not. The various estimates and opinions presented apply to this report only, and may not be used out of the context presented herein.
12. The obligations of *CHAPIN Associates Ltd.* and the Company are solely corporate obligations, and no officer, director, employee, agent, shareholder or controlling person shall be subject to any personal liability whatsoever to any

person, nor will any such claim be asserted by or on behalf of any party to this engagement or any person relying on the report.

- 13.** Due to the economic and individual motivational influences that may affect the sale of intellectual property, *CHAPIN Associates Ltd.* assumes no responsibility for the actual price of the subject intellectual property if it is sold or transferred.
- 14.** This report is not to be disclosed, in whole or in part, outside the client's organization without our prior written approval, except for the parties involved in the referenced transaction or litigation matter.
- 15.** This report is to be used solely for the purposes described in the report. A valuation for a different purpose, or under a different standard of value, or for a different date, could result in a materially different value conclusion.
- 16.** We express no opinion for matters that require legal or other specialized expertise, investigation, or knowledge beyond that customarily employed by financial economists.
- 17.** We express no opinion as to: (1) the tax consequences of any transaction that may result, (2) the effect of the tax consequences of any net value received or to be received as a result of a transaction, and (3) the possible impact on the market value resulting from any need to effect a transaction to pay taxes.
- 18.** No investigation of title to the asset has been made. Ownership claims to the asset are assumed to be valid. No consideration has given to liens or encumbrances that may exist against the intellectual property except as mentioned in the report.

While we believe that each assumption used has been judged reasonable, prudent and justifiable, because any valuation process is not an exact science, we cannot assure that the foregoing assumptions are in all cases applicable.

Because the transfer of IP assets involves numerous assumptions and uncertainties, not all of which can be quantified or ascertained prior to engaging in an actual transaction, we express no opinion as to whether the IP assets would be transferred or licensed for the amount which we arrived at in our conclusion.

We have not independently verified the accuracy and completeness of the information supplied to us with respect to the IP asset being valued.

This valuation report is furnished solely for your benefit and may not be relied upon by any other person without our prior written consent. This valuation report is delivered to you subject to the conditions, scope of the engagement, limitations and understandings set forth in this valuation report.

It is further understood that in no event, regardless of the legal theory advanced, shall *CHAPIN Associates Ltd.* be responsible to you or your affiliates other than for its gross negligence, bad faith, willful misfeasance or reckless disregard of its obligations or duties.

VIII. CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct. However, we have relied, without independent verification, on the accuracy, completeness, and fairness of all financial and other data that were publicly available for furnished to us by the management of the subject business and their accountants, legal counsel or other advisors.
2. The reported analyses and value conclusions are limited only by the reported assumptions and limiting conditions, and is our unbiased professional opinions.
3. We have no present or prospective interest in the property that is the subject of this report; we have neither personal interest nor bias with respect to the parties involved.
4. Our compensation is not contingent on an action or event resulting from the analyses, nor the use of this report.