

# Avoiding the patent storm

SFAS 141 was issued five years ago in the US to change the way in which acquiring companies value assets and view intangibles involved in an M&A deal. In order to avoid future problems such companies would do well to ensure that IP experts take part in the valuation process

By **Bryan Benoit** and **Kimberly Cauthorn**

Corporate transactions frequently include the transfer of intangible assets, including highly valuable patented technology. Post-closing, these rights and their fair values, as stated on the balance sheet, may be the subject of a number of subsequent business and financial activities including patent insurance, monetisation and litigation.

In this article, we explore the effect of intangible asset valuation for financial reporting purposes on reasonable royalty damages quantification, insurability of IP assets, out-licensing, and collateralisation, and the proactive role attorneys, intellectual asset managers and fiduciaries may take to avoid intellectual property transaction-related disaster.

## Patented technology in the eye of the storm

Consider the following scenario. Alpha Buyer (Alpha) acquires Small Seller (Small). In the transaction Alpha considers the patented technology of Small to be highly valuable. Alpha intends to use the patented technology in the ongoing operations of the business and also sees an opportunity to enforce the patent rights against alleged infringers. Alpha also has identified opportunities to license some of the patents acquired from Small to third parties non-exclusively in alternative fields of use. It has been disclosed in the due diligence process that Small has corresponded with allegedly infringing companies inviting them to license, but never filing a patent infringement law suit. There are between eight to 10 years remaining until expiration of the key patents in the Small portfolio.

In the fair value appraisal process Alpha retains the services of an outside appraiser to determine the fair value of all assets, including the patent portfolio, as required by the Financial Accounting Standards Board (FASB) for all companies with audited financial statements in the United States. The engagement is managed through the accounting office and reviewed and approved by Alpha's auditors. Documentation related to licensing is requested by in-house counsel but neither in-house nor IAM practitioners participate in the appraisal process. In the valuation of the patented technology it is concluded that a royalty rate of 3% of sales is reasonable and that this rate is applicable to the entire portfolio. Further, it is determined that the economic life of the patented technology should be limited to two years due to expected technological obsolescence. As a result, the value of patented technology acquired from Small is stated on the balance sheet at US\$5 million.

In the year after closing, given that there is strong likelihood it will be asserting the Small patents and wants to protect the patents against invalidity claims, Alpha decides to obtain first party intellectual property insurance for the patent portfolio. But, what amount of coverage should be obtained? What does the insurer require?

Four years later, Alpha files suit against an alleged infringer identified by Small prior to closing. Unaware of the SFAS 141 report and purchase price allocation conclusions, damages experts retained by outside counsel in the case apply the *Georgia-Pacific* factors and conclude that a royalty rate of 7% is reasonable and that reasonable royalty damages are in the range of US\$20 million. In discovery, the SFAS 141 report is

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produced by Alpha suggesting that the patented technology should have been obsolete a year earlier and that Alpha believed a 3% royalty was reasonable.

The concluded fair value of patented technology in a transaction can raise a number of significant questions and have implications on other intellectual property-related matters, including patent litigation.

### FASB – Statement of Financial Accounting Standard 141

On 30th June 2001, Statement of Financial Accounting Standard (SFAS) 141 became the standard required to account for transactions in the United States. Under this accounting standard issued by the FASB, buyers were no longer able to account for transactions under any method other than the purchase method of accounting. One of the more significant changes resulting from SFAS 141 is that any company acquiring a business or assets must state the assets acquired and goodwill, if any, at fair value on the balance sheet. Some of the categories of intangible assets identified in SFAS 141 include: technology-based assets, such as patented technology; marketing-related assets; contract-based assets; customer-related assets; and artistic-related assets. These broad categories include approximately 30 sub-categories and can be found on page 47 of the accounting standard.

As a result of SFAS 141, hundreds of hours of time are spent by qualified professional appraisers and valuation consultants determining the valuation of each of these assets. In most cases, a detailed report complete with supporting schedules and exhibits is prepared on behalf of the buyer and reviewed at length by the buyer's auditors. Investment bankers may also be involved in the review process prior to closing. The valuation report typically states the concluded value of each of the intangible assets acquired. With regard to patented technology it may include information about licensing agreements, comparable licensing transactions, expected future sales covered by patented technology and royalty rates.

### Industry comparison

The chart on this page covers transactions completed in 2004 and illustrates the relative differences in absolute US dollar value between various classes of assets acquired in the technology versus energy industries.

Transactions in the technology industry stated larger allocations to intangible assets

and goodwill, while those in energy were smaller. The average consideration paid in the technology industry transactions was US\$128 million. Meanwhile the average energy industry transaction was US\$625 million. Conversely, the average allocation percentage to intangible assets, including patented technology, was 31% in the technology industry and only 9% in the energy industry.

These transaction statistics and other comparative analyses may provide useful information about the significance of intangible assets relative to transaction size across industries, and may be used to highlight industries where IAM managers and in-house patent counsel should consider being more involved in the collection of information used in appraisals during the merger and acquisition process.

### Insurance considerations

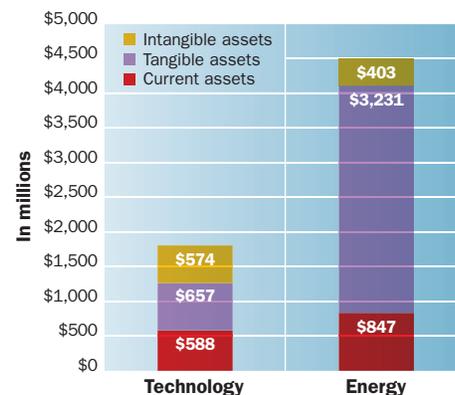
In order for the amount of coverage to be determined, the insurer typically requires that a value be established for the covered patents. Should the patents be invalidated, title to the patents successfully challenged, or some other event occur that triggers a claim, then the amount paid by the policy will be calculated according to how the covered patents were valued during the underwriting process. For example, if the patent is generating licensing royalties, then the policy might cover anticipated royalties over a specified period and the royalties would be tracked over time to ensure the policy holder was not over or under-insured. In the event of a loss, the policy would pay the difference between the actual and anticipated royalties.

In other cases, a patent might be insured for a fixed sum that is believed to approximate its value. This might apply in situations where a loan has been made against the patent and the lender requires insurance to stand behind the appraised value of the patent.

The insurer may also use established valuation methods such as relief from royalty. While insurers typically do not have hard and fast rules for how the covered IP is valued, they do require that the patent be valued at the inception of the policy and that the same valuation method be used at the point of loss.

An important additional step in underwriting first party intellectual property coverage is determining whether the patent's value is supported by the patent itself. Rather than assuming validity, the insurer seeks to determine, as cost effectively as

Transactions in the technology and energy sectors 2004



## Summary of Georgia-Pacific factors and potential overlap in SFAS 141 patented technology valuation

### Existing, prior and comparable licences

**Factor 1:** “The royalties received by the patentee for the licensing of the patents-in-suit, proving or tending to prove an established royalty.”

Potential overlap

**Factor 2:** “The rates paid by the licensee for the use of other patents comparable to the patents-in-suit.”

Potential overlap

**Factor 3:** “The nature and scope of the licence, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.”

**Factor 4:** “The licensor’s established policy and marketing programme to maintain his patent monopoly by not licensing others to use the invention or by granting licences under special conditions designed to preserve that monopoly.”

### Commercial considerations

**Factor 5:** “The commercial relationship between the licensor and the licensee, such as whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.”

**Factor 6:** “The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.”

**Factor 7:** “The duration of the patent and the term of the licence.”

Potential overlap

### Established profitability of patented product/commercial success

**Factor 8:** “The established profitability of the product made under the patent; its commercial success; and its current popularity.”

Potential overlap

### Utility and advantage of patent/benefits of the invention to the user

**Factor 9:** “The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.”

Potential overlap

**Factor 10:** “The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.”

### Extent of the use of the invention by the infringer/evidence of probative value of use

**Factor 11:** “The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.”

### Apportionment of profit

**Factor 12:** “The portion of the profit or of the selling price that may be customary in the particular business or incomparable businesses to allow for the use of the invention or analogous inventions.”

Potential overlap

**Factor 13:** “The portion of the realisable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.”

Potential overlap

### Hypothetical negotiation and conclusion of reasonable royalty

**Factor 14:** “The opinion testimony of qualified experts.”

**Factor 15:** “The amount that a licensor (such as the patentee) and the licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is the amount which a prudent licensee – who desired, as a business proposition, to obtain a licence to manufacture and sell a particular article embodying the patented invention – would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a licence.”

Potential overlap

possible, the strength of the patent.

An example of this type of coverage, along with articles about first party intellectual property coverage, can be found at [www.4continuity.co.uk](http://www.4continuity.co.uk).

**Patented technology valuation procedures versus the Georgia-Pacific factors**

The court in *Georgia-Pacific v US Plywood*, 318 F Supp 1116, 1119-20 (SDNY 1970) set forth 15 factors that should be considered in the determination of a reasonable royalty rate and the quantification of royalty damages in patent infringement cases. These factors are summarised on page 39.

With each transaction accounted for under SFAS 141, intangible assets are transferred and accounted for on the buyer's balance sheet at fair value, defined under SFAS 141 as follows: "The amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced liquidation sale."

This definition under SFAS 141 has some similarities to the factors in the *Georgia-Pacific* case, which is relied on by damages experts when quantifying a reasonable royalty rate that would have been agreed to between licensors and licensees in a hypothetical negotiation prior to infringement.

It is interesting to examine these definitions, the stated results of patented technology appraisals and their relevance, if any, to the quantification of reasonable royalty damages in patent infringement litigation. While it is clear that similarities exist in these definitions and the quantitative valuation and damages opinions that stem from them, it is common for corporate accounting and finance professionals and independent appraisers to identify and value patent rights when implementing the SFAS 141 standard without interviewing or receiving meaningful commentary from IAM managers or in-house patent counsel. As a result, the analysis completed in connection with the allocation of the purchase price paid may be less than comprehensive, and in some instances may have implications for the company as it seeks to pursue activities such as licensing, litigation, or further sale.

**Accepted approaches to valuing patented technology for financial reporting**

The approaches to valuing patented technology are similar to those applied in the valuation of a business and include: the income approach, the market approach and the cost approach. A variation of the income approach employed by

appraisers in valuing patented technology is the relief-from-royalty method, a hybrid between the income and market approaches. Other approaches used to value intellectual property frequently include:

- A relative valuation, based on comparable intellectual property transactions (market approach).
- An analysis of the premium profits or excess earnings associated with the intellectual property (income approach).
- Analysis of the cost to develop the intellectual property (cost approach).

These approaches have been defined over time by regulatory agencies such as the Internal Revenue Service (IRS), the FASB and the SEC. The table on this page (right) includes a list of IRS Revenue Rulings and FASB Statements of Financial Accounting Standards containing definitions of value, as well as significant court cases that have defined measures of patent damages.

The cost approach is seldom used to estimate the value of patented technology, as patents are inexpensive to obtain relative to the cash flow they may generate for the owner. Of course, this may vary by industry and the nature of the patents. Each case is determined by its specific facts and circumstances. In situations where an asset can be used more than once, by more than one licensee for multiple purposes simultaneously, a profit or cash flow measure usually provides a more accurate assessment of value. The simple out-of-pocket cost is sometimes used to measure the lower end of a range of value that may be applicable. Profit or cash flow adjustments to out-of-pocket cost may also be made to include opportunity cost, thereby increasing value.

**Defining value and patent damages**

**Business and intangible assets**

- **1920** – Appeals and Revenue Memorandum (ARM) 34 (Existence of goodwill)
- **1959** – Revenue Ruling 59-60 (Fair Market Value)
- **1965** – Revenue Ruling 65-193 (Separate appraisal of the tangible and intangible assets of a business)
- **1968** – Revenue Ruling 68-609 (Excess Earnings Method)
- **2001** – Statement of Financial Accounting Standard 141/142 (Intangible Asset Valuation and Goodwill)

**Patents**

- **Panduit Corp v Stahlin Bros Fibre Works Inc**, 575 F2d 1152 (6th Cir 1978).
- **Rite-Hite Corp v Kelley Company Inc**, 56 F3d 1538 (Fed Cir 1995).
- **King Instruments v Perego**, 65 F3d 941 (Fed Cir 1995).
- **Georgia Pacific Corp v United States Plywood Corp**, 318 F Supp 1116 (SDNY 1970).
- **State Industries v Mor-Flo Industries Inc**, 883 F2d 1573 (Fed Cir 1989).
- **Lam Inc v Johns-Manville Corp** 718 F2d 1056, 1065 (Fed Cir 1983).
- **Grain Processing Corp v American Maize-Products Co**, 185 F3d 1341 (Fed Cir 1999).
- **BIC Leisure Prods Inc v Windsurfing Int'l Inc**, 687 F Supp 134, 138 (SDNY 1998), rev'd in part, 1 F3d 1214 (Fed Cir 1993).

**The SFAS valuation process**

Adviser engaged	■				
Initial information gathering	■	■			
Initial management			■		
Meetings/site visits			■	■	
Review all company provided data			■	■	
Prepare valuation analysis			■	■	■
Findings presented				■	■
Report prepared				■	■
Mgmt comments incorporated					■
Final report issued					■
	Week one	Week two	Week four	Week five	

## Forecast of value of acquired intangibles

## Valuation of certain assets acquired

Valuation as of March 5, 2002 (\$ thousands)

Patent portfolio value	Group expires	Relative composition	12/31/2001	12/31/2002	12/31/2003	12/31/2004	12/31/2005
<b>Protected revenues</b>							
<i>Mobile Services Division (MSD):</i>							
Terminals	2014	78.5%	\$114,000	\$141,821	\$313,601	\$308,899	\$278,084
Readers/scanners:							
CCD	2003	2.8%	4,000	4,976	11,004	10,839	9,757
Laser	2001	0.3%	460				
Docking stations	2013	2.9%	4,200	5,225	11,554	11,380	10,254
Printers	2013	15.5%	22,500	27,991	61,895	60,967	54,885
Total MSD		100.0%	\$145,160	\$180,586	\$399,319	\$399,331	\$354,094
Growth%				24.4%	121.1%	-1.5%	-10.0%
Radios	2013		29,000	89,447	86,254	89,459	77,401
Growth%			nm	208.4%	-3.6%	3.7%	-13.5%
Residual revenue protecton			30,000	30,000	30,000	30,000	30,000
<b>Total protected revenues</b>			<b>\$189,563</b>	<b>\$253,138</b>	<b>\$388,380</b>	<b>\$344,903</b>	<b>\$277,128</b>
<b>Patent portfolio revenues</b>		<b>Protection</b>					
Revenues protected:							
Terminals		17.5%		\$24,819	\$54,880	\$54,057	\$48,665
Readers/scanners							
CCD		50.0%		2,488	5,502	5,419	4,879
Laser		0.0%		0	0	0	0
Radio		20.0%		17,899	17,251	17,892	15,480
Docking		10.0%		523	1,155	1,138	1,025
Printers		5.0%		1,400	3,095	3,048	2,744
Residual protection		17.5%		5,250	5,250	5,250	5,250
Avoided revenue decline				\$52,368	\$87,133	\$86,805	\$78,042

Applying a market approach to value a patent right is also often challenging, since the terms of intellectual property transactions are not typically disclosed to the open market place. Thus, an income approach is typically relied on to quantify the value of patents and other intangible assets.

The other variations of the income approach typically used in the valuation of intangible assets are: profit split method; return on assets method; excess operating profit method; relief-from-royalty valuation method; and comparative margin analysis.

Through the application of these various methods, appraisers complete a number of quantitative and economic analyses that are similar in form and substance to those included in *Georgia-Pacific* factors 1, 2, 7, 8, 9, 12, 13 and 15. Under certain situations these fair value analyses completed for financial reporting purposes could become

relevant to consider in the quantification of patent damages.

**SFAS 141 and the valuation process**

The SFAS 141 valuation process can be broken down into distinct steps. Generally these may be referred to as data collection and gathering, review and analysis, and reporting.

Intangible assets defined in the SFAS 141 accounting standard may be identified through information gathering and interviews with management. These meetings are often with executives in accounting or finance. Discussions may cover ways that acquired intangible assets will be used. For example, appraisers may learn whether or not a trade name or trademark will continue to be used once the transaction closes and, if so, for how many years. The existence of non-patented technology or in-process research

## Sample valuation summary

## Valuation of certain assets acquired

Valuation as of March 5, 2002 (\$ thousands)

WACC Reconciliation	1996 balances	Percent of total	Required rate of return	Weighted rate of return	Percent of total WACC	Required amount of return	As a % of revenues
<b>Required return on assets</b>							
Current assets	109,147	20.59%	9.29%	1.91%	11.79%	10,138	3.2%
Net fixed assets	19,740	3.72%	10.17%	0.38%	2.34%	2,008	
Other assets	13,457	2.54%	10.17%	0.26%	1.59%	1,369	
Workforce	6,200	1.17%	16.00%	0.19%	1.15%	992	
Patent portfolio	16,000	3.02%	16.00%	0.48%	2.98%	2,560	
Developed technology	1,100	0.21%	16.00%	0.03%	0.20%	176	0.1%
In-process technology	138,000	26.04%	17.00%	4.43%	27.29%	23,460	7.5%
Future products/immaterial	226,356	42.71%	20.00%	8.54%	52.66%	45,271	14.4%
Business enterprise value	\$530,000	100.00%		16.22%	100.00%	85,973	
<b>Weighted individual assets returns (rounded)</b>				<b>16.00%</b>			
<b>Actual weighted average cost of capital</b>				<b>16.00%</b>			

and development may be identified.

Overlapping and non-overlapping contractual and non-contractual customer relationships may be analysed. And, patented technology may be identified.

During this process forecasts are often provided by management and vetted by appraisers prior to forming a value opinion. Management forecasts are contemporaneous documents kept in the ordinary course of business and may be discoverable in litigation, as may the appraisal report itself. The hypothetical work paper on page 41 is an example that shows the type of information management will sometimes disclose in the process.

This work paper includes both a revenue forecast by product line and an estimate of the percentage of product revenue that is assumed to be covered by the patent portfolio, as shown in the area boxed in red. Do these calculations or the disclosure of this information present any challenges? Management, including legal counsel, should be aware of the disclosure of this information in both substance and form and give special consideration to its presentation to the extent that others may rely on it beyond the current transaction (eg, insurance, out-licensing, damages and collateralisation).

Once all of the required valuation procedures have been completed and a value of each asset is determined, a summary of intangible asset values is typically included in

the report to management. The table on this page is a hypothetical illustration of what might be included in such a summary. Note that information such as the value of the patent portfolio, its percentage relationship to total business value, required rate of return and value as a percentage of revenue may be disclosed through this type of report or exhibit.

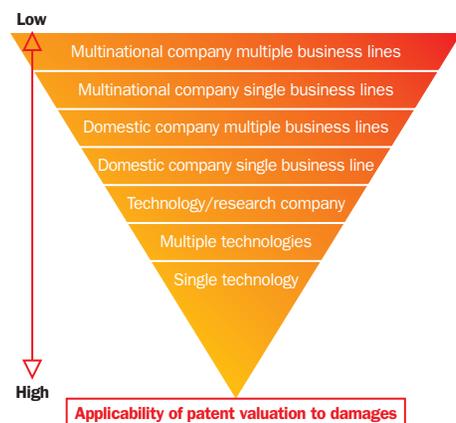
#### SFAS 141 process improvements to consider

Given the specific nature of SFAS 141, it is not surprising that management involvement is often within the accounting and finance departments, but in certain fact-specific situations the process may need to include others. Based on the relative importance of patented technology to the transaction and what will be done with it post-closing, other professionals such as in-house or outside counsel and IAM professionals may need to be involved in the process to improve it.

Of course, any independent appraiser or consultant retained by a company to assist with the SFAS 141 should remain independent in fact and appearance. However, there are a number of ways to be appropriately involved in the process. Specifically with regard to patented technology, attorneys and IAM practitioners will want to participate in information collection and gathering, and management interviews.

Further, with regard to these two important process steps, it may be in the best interests of the acquiring company to

### Acquisition target characteristics



give added consideration to how business plans, financial statements and other information provided will be relied on in the appraisal process, and how reports and conclusions prepared on behalf of the company will be presented. Some of the information items presented in fair value reports may include information such as technology obsolescence, product revenue forecast, risk and required rates of return, profit attributable to the technology and royalty rates.

The relevance of this information and the respective level of detail surrounding it may become increasingly important given the nature of the transaction and the patented technology acquired. In certain instances this information may be highly relevant with regard to the quantification of patent damages.

The chart on this page shows the increasing applicability of patented technology valuation to patent damages as the specific business characteristics of an acquisition target vary from multinational with multiple business lines to a single acquired patent technology.

In-house counsel and IAM practitioners may consider the following during the acquisition and subsequent valuation processes:

- Is a portion of the patent portfolio acquired more valuable than the portfolio overall?
- Can the patent portfolio be separated into commercial patent families?
- Are the acquired patents essential to the business acquired and related products?
- Have certain patents acquired been the subject of prior litigation?
- Are certain patents acquired likely to be asserted against infringers?
- Will patent insurance covering the acquired patents be purchased?
- Will the acquired patents be licensed to other companies?
- Will the acquired patents be used as collateral for loans?
- Are there alternative fields of use for the patented technology?
- Are the patents likely to be used as bargaining chips in negotiating cross-licenses with competitors?

If the answer to any of these questions is yes, then it may be in the best interest of the acquiring company and its management to expand the scope of the SFAS 141 process as it relates to patented technology. For example, management may consider requesting a specific valuation analysis of

certain patented technology as part of the overall appraisal. Develop a process that ensures Alpha does not unintentionally over- or understate the value of Small's patent portfolio in its effort to comply with FASB 141, and retain a valuation professional to complete the valuation of all assets acquired. Such a process should, at the very least, require that representatives from legal, financial, product development and IAM discuss the possible intended uses of the patented technology, and the relationship between the value of the IP and what Alpha intends to do with the IP.

People who have lived through a hurricane know to prepare in advance for a hurricane by focusing on what is most valuable and therefore in greatest need of getting out of the storm's path. Similarly, a buyer should consider analysing the relationship between the value of the patents and what the acquiring company intends to do with them. How will assumptions relied on in today's intangible asset valuation be viewed tomorrow? Expanding the scope of the SFAS 141 valuation may allow the company to avoid the damage caused by a storm of post-closing patented technology valuation and economic analysis issues. ■

**Bryan Benoit CPA/ABV, CVA** is a managing director of Kroll in Houston, Texas  
**Kimberly Cauthorn JD** is a director of Kroll in the same office. Ms Cauthorn is also a member of the Intellectual Asset Finance Society council