

License Transactions and Royalty Rates

AERONAUTICS & DEFENSE

Avionics - 10% of sales

Sundstrand is the leading supplier of aircraft electric power systems. The company's systems are installed on every current commercial aircraft platform offered by Boeing and Airbus Industries, most regional jet aircraft, and many of the world's military aircraft. This scope of coverage is important both for the significant aftermarket business it generates and for the ongoing relationships it provides with customers.

Sundstrand Corporation and the IRS split a major decision on foreign-unit income that may provide an indication of an appropriate royalty rate for avionics technology. The decision was reached in Tax Court regarding a dispute with the IRS about the proper level of payments between Sundstrand and a Singapore subsidiary that supplies parts for avionics systems. When a subsidiary company is located in a low income tax country, parent companies can shift income to the low tax rate jurisdiction by paying unreasonably high transfer prices for equipment that the foreign subsidiary produces for the parent. The shifting of income is further accomplished if the parent company accepts a below "market" licensing royalty rate for use of the parent company's technology. In the Sundstrand case the IRS adjusted taxable income by adjusting the prices at which goods were transferred to the parent company in the US. The IRS also adjusted the royalty rate that the Singapore subsidiary paid for the use of Sundstrand technology.

The taxable profits of Sundstrand were based on the purchase of components from the Singapore subsidiary at a 15% discount off the retail price charged by the subsidiary. The profits of Sundstrand also reflected that licensing royalties from the Singapore unit were paid at 2% of sales. In Tax Court the judge rejected the IRS' claims that the Singapore unit was a low profit margin subcontractor and accepted Sundstrand's argument that the unit was an independent subsidiary. The court however decided that the transfer prices between the two companies should indeed be adjusted and decided that a 20 percent discount off catalog prices was more appropriate and that a licensing royalty rate of 10% of sales for the avionics technology was more appropriate. Source: Licensing Economics Review, March 1991.

Collision Avoidance – Common stock plus \$150,000 plus 3% of sales

Flight Safety Technologies, Inc. is developing three new technologies designed to enhance aviation safety and efficiency. These technologies include SOCRATES®, UNICORN™, and TIICM™. SOCRATES® is a technology being developed into a ground-based laser acoustic sensor to detect and track wake vortices at airports. UNICORN™ is a technology being developed into an airborne radar for collision avoidance and ground proximity warning. TIICM™ is a technology that will protect commercial and military aircraft against terrorist threats from heat seeking missiles. The UNICORN™ technology is described below.

UNICORN™ - The company is pursuing the development of an airborne collision and ground proximity warning system. During August, 2005 the company tested a UNICORN™ prototype antenna in a proof-of-principle test. The data collected from this test is currently being analyzed and the company is considering how best to proceed with plans for the eventual commercialization of UNICORN™.

The company's original plan for UNICORN™ technology was to provide a low-cost, combined, collision alerting and ground proximity warning capability for general aviation

On October 5, 2011, the company entered into a license with BBGN&K LLC for the rights to use certain patented technologies of which BBGN&K owns the patents. Mr. Aladesuyi is the managing member of BBGN&K. The license agreement calls for royalty payments beginning in 2012 of 8% of EarthSearch's revenues to be paid quarterly. Also on October 5, 2011, the Company's Board of Directors approved the issuance of 1,428,572 shares of Series A preferred stock to Mr. Aladesuyi as payment of \$200,000 initial license fee. Royalty fees were \$6,327 and \$4,013 for the years ended December 31, 2014 and 2013, respectively. Additionally, the company has prepaid \$90,956 of royalty fees it expects to incur for 2015 as of December 31, 2014.

Source:

https://www.sec.gov/Archives/edgar/data/1256540/000101968715001467/ecdc_10k-123114.htm

HD Optical Technology - License fee plus 10 cents per player and 2 cents per disk

Blu-ray Disc says two licenses are necessary to produce and sell products utilizing Blu-ray Disc technology. Blu-ray HD optical disc format is being touted by proponents as successor to DVD. One is the Blu-ray Disc Rewritable Format & Logo License Agreement (FLLA), required to obtain a license for format specifications (excluding patents) and logo developed and owned by nine companies. The second requirement is a license for Content Protection System Adopters (CPSA) Agreement for Blu-ray Disc Rewritable, which gives the licensee use of copyright protection system specifications and keys from Matsushita, Philips, Sony. The group is offering ten-year renewable licenses. The two licenses carry separate royalty payments. Blu-Ray Disc is composed of a group of nine companies that formed the group to design the successor to the DVD. The group's members are Hitachi, LG Electronics, Matsushita, Philips, Pioneer, Sony, Samsung, Sharp and Thomson. By using a blue laser instead of red one, up to 27 GB of high density recording can be stored on a single disc. The nine companies involved in the development of the new technology will develop products to take advantage of the increased capacity and high speed of data transfer that the new technology offers.

The founders are offering licenses as 10-year renewable contracts, but didn't divulge any information about terms or cost of licensing or even what patents applied and what company or companies owned them. Patent licensing arrangements for current DVD format took some time to work out, and ultimately wound up as department store of separate patent pools and individual companies instead of one-stop-shopping venue for licensees. Besides needing license for pooled patents of 3C group (Philips, Pioneer and Sony) and 6C group (Hitachi, JVC, Matsushita, Mitsubishi, Toshiba, Warner and, lately, IBM), prospective vendors of DVD hardware and software need separate licenses from entities that include DiscoVision, Dolby, MPEG-LA, Nissim, Thomson. Meanwhile, DVD patent owners cross-license one another under terms that remain undisclosed.

For FLLA, the cost is \$30,000 for players and recorders, \$20,000 for software media. The group also said that royalties were due for components and manufacturing and testing equipment, but royalty was capped at \$60,000 for vendors taking licenses in three or more areas.

The royalty for CPSA is \$12,000 for players and recorders, \$8,000 for software media, and \$4,000 for components. There also is a fee for Copyright Protection Key, levied at 10 cents per set for players and recorders, 2 cents for each disc, and a \$500 "fulfillment fee" for each order.

Source: Licensing Economics Review, February 2003.

Headphone - 5% of sales

On June 10, 2013, Exeo Entertainment, Inc. entered into a license agreement with Psyko Audio Labs, Canada whereby Exeo Entertainment, Inc. will manufacture and market the Psyko

Source: Form S-1 Aironet Wireless Communications, Inc. Exhibit 10.5, May 14, 1999
<http://www.sec.gov/Archives/edgar/data/1082852/000095015299004484/0000950152-99-004484.txt>

COMPUTER HARDWARE

1394 Specification - \$1 per port

Apple Computer is seeking royalties of \$1 per port from chip and system makers using the 1394 interface, which was born at Apple as Firewire. The move has sparked high-profile protests, including a call from a senior Intel vice president to Apple CEO Steve Jobs. Sources said some companies considering 1394 have backed off until the dust settles. But at least one chip maker is still upbeat about the interface: Texas Instruments is expected to announce that it shipped nearly 1 million 1394 chips in the fourth quarter. The interface has appeared in various camcorders; in PCs from Compaq, NEC and Sony; and in Apple's latest G3 Macintosh computers. Source: Licensing Economics Review, February 1995.

1394a Specifications - \$0.25 per product

Six companies from the consumer electronics and PC industries announced a patent pool for 1394 specifications licensing last week. The move was made to try and quell rumors that Apple Computer Inc. had taken a hard line approach to licensing 1394 IP related to the upcoming 1394a specification. With prices of digital camcorders enabled with the high-speed bus falling and more PC vendors incorporating the capability into desktops, interest in the technology originally branded as Firewire is growing. Pool members Apple, Compaq Computer Corp., Matsushita Electric Industrial Co., Royal Philips Electronics, Sony Corp. and Toshiba Corp. are expected to charge manufacturers of shrink-wrapped products featuring 1394 (such as PCs, camcorders and stand-alone disk drives) a fee of about 25 cents per product. Vendors bringing 1394 products to market, however, are likely to be assessed other patent charges. At least two other companies, IBM Corp. and STMicroelectronics NV, have critical 1394 patents. Source: Licensing Economics Review, April 1999.

Acer Personal Computing - Cross License

Acer Inc. and International Business Machine have agreed to cross-license all patents related to data processing apparatus. The agreement allows Acer and IBM to research, develop, market and sell personal computers without the risk of infringing each other's patents. Specific terms of the agreement are confidential. The agreement is part of Acer's plan to establish cross-license agreements and closer working relations with leading technologies in the world. The company has already developed a patent-related cross-license agreement with Intel.

IBM has a number of cross-license agreements with Taiwanese semiconductor makers and over 100 royalty-bearing patent license agreements in Taiwan but this agreement is the first such cross-license agreement IBM has made with a Taiwan-based personal computer company. IBM has a portfolio of more than 32,000 and Acer has held more than 400 patents for its chip upgrade computer system, notebook power management and other computer inventions. Source: Licensing Economics Review, February 1996.

companies in the WAP Forum have also laid claim to IPR on WAP technology. Among them: Motorola Inc., NEC and Nokia OY. But so far, they have remained quiet about any charges they may choose to levy, letting the market develop first. Their fear is that crucial content providers and application developers may be scared off creating WAP services if they realize they are built around technology that requires licensing fees.

Geoworks' licensing plan charges service providers, handset manufacturers, application developers, content providers and any other company using WAP \$20,000 a year, although Geoworks will not charge companies with less than \$1 million in annual revenue. Server manufacturers would also be charged 10% of the hardware cost, or a minimum royalty of \$1 for each user or product including the software. Geoworks' intellectual property is patented in the United States and Japan only.

Geoworks' announcement reminded a whole raft of companies looking to offer WAP services that the protocol, unlike the basic technology of the World Wide Web, belongs to a number of companies. Any one of these companies may levy additional fees in the future. Fear of multiple WAP licensing fees could even create enough impetus for a different technology to emerge.

MECHANICAL

Amorphous Alloys - 10% of sales

Liquidmetal is a materials technology company that develops and commercializes products made from amorphous alloys. Its Liquidmetal® family of alloys consists of a variety of proprietary coatings, powders, bulk alloys, and composites that utilize the advantages offered by amorphous alloy technology. Liquidmetal develops, manufactures, and sells products and components from bulk amorphous alloys to customers in various industries, and Liquidmetal also partners with third-party licensees and distributors to develop and commercialize bulk Liquidmetal alloy products. Liquidmetal believes that its proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace. In addition to bulk alloys, Liquidmetal markets and sells a line of proprietary amorphous alloy-based industrial coatings under the Liquidmetal Armacor™ Coatings brand.

Amorphous alloys are in general unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys are proprietary amorphous alloys that possess a combination of performance, processing, and potential cost advantages that the company believes will make them preferable to other materials in a variety of applications.

The amorphous atomic structure of Liquidmetal's alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. For example, in laboratory testing, Liquidmetal's zirconium-titanium Liquidmetal alloys are approximately 250% stronger than commonly used titanium alloys such as Ti-6Al-4V, but they also have some of the beneficial processing characteristics more commonly associated with plastics. Liquidmetal believes these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, Liquidmetal believes these