

## II. The Celebrated “MPEG LA” Case

### 1. From the First Steps to a Rising Star

“MPEG LA” stands for “The Moving Picture Experts Group Licensing Administrator” and probably represents one of the most current and significant examples of a patent pool,<sup>157</sup> from both an international and economic perspective.

It all started in the late 1980’s when a panel of engineers came together to establish an industry-based standard for digital video compression, which is basically a process where digital videos are compressed in size, enabling high transfer rates. It covers the video compression tools that make it possible to squeeze full-length films onto DVDs, stream video over the Internet, and send high-resolution television over cable lines. For these reasons MPEG is among the most used digital standard formats for movies and video-clips on the Internet today.

The panel of experts recognized that the biggest problem in implementing the standard was that many different patent owners were involved, which resulted in a typical “patent thicket” situation,<sup>158</sup> nowadays a notorious problem throughout the legal doctrine analysing patent pools. The solution has been to establish an independent company that would manage the pool of patents allowing “one-stop shopping”, i.e. a centrally organized platform where all relevant licenses can be acquired as a unique package,<sup>159</sup> for patent holders and licensees. In 1996 the MPEG LA was born.<sup>160</sup>

Even if in recent years patent pools have become popular in the consumer electronics sphere, the MPEG-2 was the first one of its kind to take on such a significant dimension in the international and economic scene. In contrast to the so-called “mega-pools”, sharing all patents within a specific industry, the MPEG-2 pool was primarily based on one central technology and consequently limited to underlying essential patents, aside from various adjustment mechanisms for adding newly emerged patents, according to pre-determined criteria, and fixing royalty rates, thereby conferring on it a certain degree of flexibility.

The initial members of the patent pool included: Columbia University, Fujitsu, General Instrument, Matsushita, Mitsubishi, Lucent, Philips, Scientific-Atlanta and

157 Baltes C., “Patent Pools - An Effective Instrument for the High Technology Co-operation?”, Spring 2003, available at:

[http://www.jur.lu.se/internet/english/essay/masterth.nsf/0/6C1CE2960E92A1BCC1256D2C003F6BEC/\\$File/xsmall.pdf?OpenElement](http://www.jur.lu.se/internet/english/essay/masterth.nsf/0/6C1CE2960E92A1BCC1256D2C003F6BEC/$File/xsmall.pdf?OpenElement), p. 27 *et seq.*

158 Shapiro C., University of California at Berkeley, “Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standards-Setting”, March 2001, available at: <http://www.haas.berkeley.edu/~shapiro/thicket.pdf>, p. 17 *et seq.*

159 For an analysis of the notion, see i.a.: OECD, “Science, Technology and Industry Outlook 2006”, OECD Publ., 2006, p. 157 and Takenaka T. et al., “Patent Law A Handbook of Contemporary Research”, Edward Elgar Publishing, 2008, p. 714 *et seq.*

160 Andersen S., “Inside MPEG LA, the Prototypical Patent Pool Recovering Lawyer Revolutionizes IP Management Model”, Corporate Legal Times, vol. 12, no. 130, September 2002.

Sony. Altogether, they combined twenty-seven patents and offered one-stop shopping for manufactures of television, digital videodiscs and players, telecommunications equipment as well as cable, satellite and broadcast television services. To get support for the formation of the pool, the nine patent holders identified all patents that are essential for being able to meet the MPEG-2 international standard. Their licenses were granted to all interested parties through a licensing agent (i.e. LA), administering the pool on behalf of its members and based in the United States in Denver, subsequently becoming popular as MPEG LA.

As regards its functioning, the MPEG LA employed independent experts to determine whether all relevant patents were essential and suitable to be included in the pool, in the absence of alternative specifications to reach the technical product or process targeted. At the time, the MPEG lawyers and experts reviewed over eight thousand US patents abstracts and over eight hundred patents owned by over thousand companies and inventors. Finally, they identified twenty-seven essential patents, most of which were owned by foreign inventors.<sup>161</sup> The license eventually conferred had a worldwide range and was granted, under pre-defined terms, to any licensee without discrimination.<sup>162</sup> Consequently the MPEG LA collected royalties and distributed them among the members according to a pro-rata allocation based on each licensor's proportionate share of the total number of patents contributed to the pool.<sup>163</sup>

As mentioned above, an adjustment mechanism included in the license agreement of the pool pre-determined in what way new patents were added into the existing package. Specifically, a set of norms to be used for the evaluation of new essential technologies and the corresponding recalculation of the corresponding royalties was identified by a so-called "liability rule".<sup>164</sup> Furthermore, the MPEG-2 agreement had a grant back provision that required the licensee to grant the licensor a non-exclusive grant back of any essential patent eventually retained. On the other hand, there was no other major competitive restrictive obligation on the licensee, who remained substantially free to develop substitute products also outside of the pool.<sup>165</sup>

A revealing article that appeared on the Intellectual property Law & Business Review provided an accurate economic and legal assessment of the MPEG LA's first patent pool and described it as a "royalty gold mine". Lawrence Horn, a lawyer, ad-

161 The list of current licensors may be consulted at: <http://www.mpegla.com/m2/m2-licensors.cfm>

162 The list of current licensees may be consulted at: <http://www.mpegla.com/m2/m2-licensees.cfm>

163 For a legal analysis of the MPEG-LA patent pool, see, i.a.: Russell L., "Royalty Rates for Licensing Intellectual Property", Published by John Wiley and Sons, 2007, p. 75 *et seq.*; Taplin R., "Valuing intellectual property in Japan, Britain, and the United States", Published by Routledge, 2004, p. 84 *et seq.*

164 For an insight in this legal notion, see: Merges R., "Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations", California Law Review, 1996, vol. 84, no. 5.

165 For the details of the license agreement, see: <http://www.mpegla.com/m2/m2-agreement.cfm>

ministered the pool as the company's vice president for licensing and business development. The report referred to him as "scouring the globe for intellectual property, finding all the patents for a given technology and lumping them together in one convenient package". As underlined, it could take a lot of effort and negotiating to get a patent pool off the ground, but the work was well paid off by the turnover obtained by consortia such as the MPEG-2, defined as the most lucrative ever patent pool for a technology.<sup>166</sup>

Since its creation, the MPEG-2 has evolved to comprise 650 patents from 24 holders, with some 800 licensees, including industry giants like Apple Computer Inc., and Warner Home Video Inc. It has been calculated that each time a DVD player was sold, the pool received \$2.50 for the MPEG-2 decoder contained inside the player. On the same line, each time a pre-recorded DVD was sold, the pool pocketed 3 to 4 cents. These royalties were split among the patent holders in the pool and MPEG LA took a 10 percent cut, according to the above-mentioned report. Besides, the pool picked up royalties from other products and services, such as on-demand television or computer DVD drives, that used the MPEG-2 standard. Since MPEG-2 technology first entered the market, MPEG LA has formed six patent pools, all related in one way or another to video. One pool is based on a more advanced compression technology, called MPEG-4.<sup>167</sup>

## 2. Still a Necessary Evil?

Yet, as underlined in the above-mentioned article, "even as the MPEG-2 owners take in the royalties, patent pools still cannot seem to shake their reputation as a necessary evil". Quoting the report further: "In the past decade pools have become something like the licensing version of Donald Trump: increasingly popular, even if they still seem a bit suspect [...] No patent holder goes into a pool completely happy about the idea: grouping one's patents with everyone else's patents, and licensing them en masse according to non-negotiable terms, means giving up a lot of the very control that a patent confers. Sharing IP can bring other forms of trouble, too, particularly with antitrust regulators. Pools can be structured to fix prices, stifle competition, discourage innovation, or divide markets. Yet increasingly, going it alone is a luxury companies just don't have. More and more products are built according to standards that incorporate bits and pieces of IP owned by many different companies - so many companies that getting all the necessary licenses in place can be a difficult task. If the task is too difficult, a new technology may never get off the ground, leav-

166 Cohen A., "MPEG LA's First Patent Pool Pulls in Millions of Dollars. Now the Licensing Company is wading into the Murky Waters of Digital Rights Management and Making a Royalty Splash won't be Easy", *Intellectual Property Law & Business*, vol. 05, issue 02, February 2005, also available at: <http://www.law.com/jsp/article.jsp?id=1108389913560>

167 All current information retrieved may be consulted at:  
<http://www.mpegla.com/m4v/index.cfm>

ing IP owners with patents that no one wants to license. That leaves IP owners with a tough decision: They can take a chance with a pool, hopefully spurring a market for their IP; or they can go it alone and possibly never see that market materialize. [...] MPEG LA has bet its whole business that companies won't-or can't-go it alone".<sup>168</sup>

168 Cohen A., *supra*, fn. 166, p. 2; For a comprehensive analysis, see also: Hovenkamp H. "IP and Antitrust: An Analysis of Antitrust Principles Applied to Intellectual Property Law", Aspen Publishers, 2002, p. 34 *et seq.*