Give it some gas

There is a growing recognition of the importance of IP in the oil and gas industry Mayer Brown's **Mark Prinsley** says, but exposure to litigation is also on the increase



There is a growing recognition of the importance of intellectual property rights in the oil and gas industry. The number of patents filed in the sector has grown significantly. Thomson Reuters have reported that in 2013, a total of 12,062 patents were filed in the sector. This is reported to be three times as many applications as had been filed a decade earlier. Baker Hughes, Halliburton and Schlumberger, the oil services majors, secured a total of 1,257 patents in 2012, more than double the number of patents they had obtained a decade earlier.

The growth in patent filing contrasts with the approach taken by innovators behind fracking technology in the 1990s and 2000s who, it seems, deliberately adopted an approach which involved not seeking patent protection for their technology. Their approach may have been to make their return by buying up land and mineral rights at low prices and selling high after publicising the potential of the shale gas technology developments. In a sense, this might be seen as a version of "opensource" technology for the oil and gas industry.

The increased interest in patent filing is not uniform across the world. While the overall growth in patent filing in the sector worldwide is up 30% between 2012 and 2013, the year on year growth is 18% in the US with the bulk of new patents being filed in China. In the UK, there has in fact been a fall in the number of patent applications in the sector over the last 10 years, with only 150 applications being made in 2013.

The growth in patent filing in the sector suggests an increased focus on the potential benefit of exclusivity in technology. Oil and gas businesses are likely to become more interested in deriving revenue from licensing technology and they may also have become more engaged in patent and other intellectual property litigation. This article examines some of the ways in which oil and gas companies might protect their intellectual property and highlights the potential exposure to "troll" litigation, as the importance of intellectual property rights in the industry appears to grow.

Intellectual property protection Patents

The patents system has a number of attractions for oil and gas innovators. In broad terms, a patent protects new and innovative ideas capable of commercial application. There are well established systems for searching pre-existing inventions and granting patents in countries around the world. Priority for an application can generally be based on an application in a single country. Different patent systems have different rules as to the scope of inventions capable of protection. Disadvantages are that it can be relatively expensive to obtain patent protection in a large number of countries. The "trade off" in the patent system is that the patent owner exchanges exclusivity in the invention for a period of time for disclosure of the technology to the public. This may not always serve the innovators' best interests, especially in an industry where innovations may be used in countries where it may be difficult to obtain or enforce patent rights. Also, the nature of some activities in the oil and gas industry are such that it may be extremely difficult to establish whether or not a competitor is in fact using a technology which encroaches on patent protected inventions.

Where a patent infringement action is successful the financial compensation can be significant. In 2012, WesternGeco, a subsidiary of Schlumberger, was awarded damages of more than US\$100m for patent infringement by ION Geophysical Corporation through the use of it's DigiFin product, which captured under water images to determine the likelihood of oil and gas exploration opportunities.

Trade secrets

Some types of invention or technology may be incapable of protection through the patent system, but might still give valuable commercial advantages which the innovator may wish to protect as a trade secret. Examples of this type of innovation or technology include seismic data or geophysical information used to identify locations suitable for development.

The law relating to protectable trade secrets is not harmonised around the world. There are moves afoot in Europe to produce a harmonised trade secret law across the member states of the European Union, but even here the process is at a relatively early stage by comparison to the established international systems for copyright and patent protected works.

It seems axiomatic that for data or other innovative materials to be protected as trade secrets the developer/owner of the material must themselves treat it as confidential. Care must be taken to ensure that personnel having access to the material are made aware of the confidential status attached to it. Care must also be taken to ensure that the material is not disclosed to third parties in circumstances where there is any lack of clarity as to the confidential status of the material.

The extent to which material will be capable of protection as a trade secret will be open to interpretation by the courts of the particular jurisdiction in which disclosure is made or threatened. One of the factors to be balanced against the argument that material is confidential and therefore must be protected as a trade secret, may well be the extent to which the law in a particular jurisdiction entitles an individual to use the skill and knowledge acquired during a period of employment with one company in successor activities with other employers.

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In Texas, courts have protected seismic data as trade secrets balancing factors such as the extent to which the data was known to others, the measures taken to guard the secrecy of the information and the value of the information/cost of developing it. These are all key indicators of the approach that the innovator/owner of confidential information must take to ensure it remains a trade secret.

In addition to the risk of inadvertent disclosure robbing material of its capacity to protect it as a trade secret and the risk that material may not be regarded by local courts as being sufficiently significant to be entitled to protection, is the risk that local regulators may require the disclosure of material the innovator may prefer to keep confidential. In some Western states in the US, there are laws requiring public disclosure of the chemical makeup of fluids energy companies inject into the ground to release oil and gas. There have been exemptions to those laws for "trade secrets" and perhaps inevitably, there has been litigation about how widely the trade secrets exemption should be interpreted. In the UK, information held by public bodies will be susceptible to disclosure through the freedom of information legislation, which also has an exemption for commercially sensitive information.

Technology licensing

Technology licensing will take place at many levels in the oil and gas sector. Small, highly innovative single product companies will be attractive to larger companies. Also, larger companies such as the oil majors, license their technology to other operators to generate revenue. It seems likely that the increase in patent filing in the industry is related to an increased interest in technology licensing. Where a party has patents to license, it is easier to justify meaningful technology licence fees.

Intellectual property litigation

Patents and other intellectual property rights can be used by the rights owners to maintain a degree of exclusivity in their technology, which in turn may bring economic benefit. Clearly litigation between commercial competitors such as the *WesternGeco v ION Geophysical* dispute referred to previously, is likely from time to time.

In addition, it seems that, as in other industry sectors, non-practising entities – or patent trolls – who acquire patents for the sole purpose of extracting licensing fees from entities using technology which they regard as infringing their patent rights have become active.

Oil and gas companies have been joined as defendants to litigation involving technologies used across a number of business sectors. More recently, patent trolls have begun to target oil and gas technologies directly. This increased focus on the energy sector will no doubt also stimulate oil and gas operators to look more closely at options for challenging patent rights owned by patent trolls.

Actions

Patents

While different patent systems have different rules as to the scope of inventions capable of protection, the "trade off" in the patent system is that the patent owner exchanges exclusivity in the invention for a period of time for disclosure of the technology to the public. Consider carefully whether a particular development is best protected by patents – which bring with them public disclosure of the invention or through trade secrets.

Trade secrets

Where technology is being protected through trade secrets or confidentiality, ensure that appropriate practical and contractual protections are in place to recognise and protect the value of the confidential material. Care must be taken to ensure that personnel having access to the material are made aware of the confidential status attached to it and ensure that the material is not disclosed to third parties in circumstances where there is any lack of clarity as to the confidential status of the material.

Intellectual property litigation

Non-practising entities – or patent trolls – who acquire patents for the sole purpose of extracting licensing fees from entities using technology which they regard as infringing their patent rights have become active. Look more closely at options for challenging patent rights owned by patent trolls.



