1. Introduction

Patent systems are not intended to create obstacles to technical development, but rather to foster it. For this reason most patent laws contain exceptions to infringement for experimental use of a patented invention, i.e. research aimed at improving a patented invention will not constitute an infringement of a patent. However, this begs the question of what exactly experimental use is. For example, if the use of a patented invention in the course of research was always permissible, it would clearly destroy the value of patents for scientific instruments designed for research applications.

This paper examines the issue of experimental use in relation to infringement under UK law, although reference is made to some German and Dutch cases.

2. Infringing Acts

Any of the following acts done in relation to a patented invention, without the consent of the proprietor of the patent, are infringements of the patent, subject to the exceptions referred to in Section (3) below.

In relation to a product:

- manufacture;
- disposal;
- offer of disposal;
- use;
- importation; and
- possession.

In relation to a process:

- use of the process;
- offer of the process for use, when it is obvious that such use would infringe the patent;

In relation to a product produced by a patented process:

- disposal;
- offer of disposal;
- use;
- importation; and
- possession.
In addition, it should be noted that UK law provides for contributory infringement, which will not be discussed in this paper.

3. Exceptions to Infringement

The exceptions to infringement are set out in Section 60(5) of the UK Patents Act 1977. The exceptions include:

- acts performed privately for non-commercial purposes;
- acts performed for experimental purposes;
- extemporaneous preparation of a medicine in a pharmacy;
- use in a ship which has accidentally, or temporarily, entered UK territorial waters;
- use in a aircraft that has accidentally, or temporarily, entered UK airspace; or
- use of an aircraft exempted from seizure in respect of patent claims (by the Civil Aviation Act 1982).

The present paper is concerned only with the second of the exceptions listed above.

4. Experimental Use - Statute Law

Section 60(5)(b) of the UK patents Act reads as follows:

“(5) An act which, apart from this subsection, would constitute an infringement of a patent for an invention shall not do so if -

(b) it is done for experimental purposes relating to the subject-matter of the invention;”

Two key points to note are:

(1) To benefit from the exception the experimental purposes must relate to the subject matter of the invention; and

(2) There is no exclusion for R&D carried out for commercial purposes.

This means that the experimental purposes must be directed to the subject matter of the invention and not to some other objective.

It is worth noting that the purchaser of apparatus which is intended for experimental purposes will benefit from the exception set out in Section 60(5)(b) of the UK Patent Act, but the vendor will not so benefit and may be sued for infringement.

Consider a patented electron microscope. It would be an infringement to construct such an electron microscope, in a University R&D facility, for use in investigating the structure of metal alloys, because the intended use is not directed to the subject matter of the invention, i.e. directed towards metal alloys rather than electron microscopes per se. However, it would not be an infringement to construct the electron microscope for the purpose of improving its resolution, i.e. improving the invention. If, in the latter case, the electron microscope is constructed by a third party at the instigation of the University, the
University will not infringe the patent but their supplier will.

5. **Experimental Use - Case Law**

**Monsanto v. Stauffer (No. 2) [1985] RPC 515 (CA)** establishes that experimental purpose may have a commercial end in view. This case established that trials carried out to:

- discover something unknown;
- test an hypothesis;
- determine whether something which worked under one set of conditions would also work under a different set of conditions; or
- establish whether, or not, it is possible to manufacture commercially in accordance with a patent;

constitute experimental use within the meaning of Section 60(5)(b) of the UK Patents Act 1977.

However, trials carried out to demonstrate to a third party, e.g. a regulatory body, that a product works does not constitute experimental use.

**McDonald v. Graham [1994] RPC 407** establishes that keeping a patented product for possible future commercial use does not constitute an experimental purpose.

For the relevance of Section 60(5)(b) UK Patents Act to experiments performed for purposes of litigation see **Smith, Kline & French v. Evans Medical [1989] FSR 513**.

Performance of field trials for a third party has been held, in Germany, to be an infringement of a patent, see **Ethofumesat OJEPO 1991, 196**.

Clinical trials in Holland have been held to be an infringement of a patent, see **Applied Research Systems v. Organon [1994] EIPR 243**.

Supply of a sample of a patented product to a regulatory authority has been held to be a patent infringement in Holland, see **Pharbita v. ICI OJEPO 1994, 220**.

**Auchincloss v. Agricultural & Veterinary Supplies [1997] RPC 649** establishes that making a product for the purpose of obtaining official marketing approval is an infringement of the patent covering the product.

Considering case law and statute law together, it is possible to abstract the following principles relating to the infringement exception for experimental use:

1. To fall within the exception to infringement for experimental use, the use must be directed to the invention claimed in the patent in question.
2. Whether, or not, the experimental use is conducted with commercial objectives in mind is immaterial.
3. Trials performed for regulatory purposes, or to secure a licence to market a product, do not qualify as experimental use.
4. The purchaser of experimental equipment may benefit from the exception for experimental use, but the vendor will not.

6. **Telecommunications Systems**

   In telecommunications, especially mobile telecommunications, the experimental use exception to infringement needs to considered in the following situations:

   1. **Type approval.**
   2. **Standards compliance testing.**
   3. **Use of a patented component in system development.**
   4. **Manufacture and sale of test equipment.**
   5. **System and product development.**

   Type approval and Standards compliance testing are clearly uses directed to satisfying a third party that a product, or method, meets regulatory requirements and will not, therefore, benefit from the experimental use exception to infringement.

   If a patented component, such as a chipset, or even a handset, is used in testing a complete mobile telecommunications system, the chipset/handset will not benefit from the experimental use exception, since the experimental use is directed to the system rather than the subject of the patent. An interesting question arises with patents that contain claims to a system and a transceiver for use the system. It could be argued that, since a patent is supposed to be directed to a single invention, use of a transceiver covered by the patent, for the purpose of developing the system, should benefit from the experimental use exception. However, the case law neither supports, nor denies, this proposition.

   Manufacture and sale of test equipment will not benefit from the experimental use exception. However, if a company makes a test mobile (patented) for the purposes of testing that mobile's performance itself, it will benefit from the experimental use exception.

   Development work on systems and products directed to patented aspects of those systems, or products, will benefit from the experimental use exception. However, it is important to remember that contractors producing equipment intended for experimental use in assessing and/or improving system design will not benefit from the experimental use exception. This has significant implications for supply contracts and patent indemnities in those contracts.

   Production of a patented component aimed at determining whether, or not, the production method described in a patent is commercially feasible will benefit from the experimental use exception.

   Although a number of scenarios relating to telecommunications have been outlined above, it is not feasible to consider all possibilities. Where it is intended to rely on the experimental use exception to infringement, careful consideration should be given to the applicability of the principles outlined in Section (5) above, and the contractual implications relating to associated supply contracts.

7. **Conclusions**

   The following principles apply to the infringement exception for experimental use:
1. To fall within the exception to infringement for experimental use, the use must be directed to the invention claimed in the patent in question.

2. Whether, or not, the experimental use is conducted with commercial objectives in mind is immaterial.

3. Trials performed for regulatory purposes, or to secure a licence to market a product, do not qualify as experimental use.

4. The purchaser of experimental equipment may benefit from the exception for experimental use, but the vendor will not.

The infringement exception relating to experimental use is relevant to the development of telecommunications products and systems. Before relying on this exception to infringement, careful consideration should be given to the above principles and any associated contracts.