Patent requirements for a grant (2017)

A patent must be:

1. **novel** – the subject matter must not have been published anywhere in the world, nor disclosed by the inventor in conditions of non-confidentiality.

2. **inventive** – there must be an inventive step that would not have been apparent to a knowledgeable but unimaginative worker in the field.

Consequently, a thorough search of prior art must be carried out before an application is submitted.

3. **of industrial application** – patents are ‘technical’ and so not available for purely abstract or aesthetic work or for medical or veterinary treatments (in Europe).

4. **not excluded as**:
   - a discovery, theory, mathematical method
   - an aesthetic creation (protected by copyright)
   - a mental act, business method
   - contrary to public policy or morality, eg modification of animal genetic material to cause suffering; human cloning

A computer-based invention may be patentable if it has a ‘technical effect’.

The Structure of a Patent

A patent is an hybrid scientific-legal document that comprises:

1. A brief abstract - for classification and searching.

2. A description - that summarises existing knowledge, explains the invention and how it is an improvement on the prior art followed by a detailed account of the invention with necessary drawings.

3. A number of claims, arranged in an hierarchical manner from the generic to the specific that will provide the boundaries for the monopoly claimed in the patent.

Searching to Determine Prior Art

A patent must be novel and inventive and so it is essential thoroughly to check scientific and technical journals for ‘prior art’. Worldwide published patents can be searched on Espacenet at the European Patent Office and full-text searching of life sciences patents is available at Patent Lens.

In addition, Research and Enterprise has access to a number of subscription databases, or we can commission a search through the Patent Office.
However, searching will not capture patent applications that have been filed but not published at the date of search. These represent an unavoidable ‘blind spot’ in the process that may last for up to 18 months.