



## PatBase Family Definition

In PatBase, patents are grouped into families if they contain one or more common priorities with other patent(s). This type of family grouping is often referred to as "extended families". The other commonly used grouping is "simple families", which requires all members of the family to have identical priorities. PatBase only uses simple family grouping in special circumstances (see below).

Initial patent filings do not necessarily have a priority. For example, look at FN=33229800. The front-page PDF of GB2438930 does not claim a priority; this is because it is the first filing. If the applicant/assignee then wants to file overseas, he has one year in which to do so, and can then claim his GB application number (0611288) as priority. Both EP1864788 and U52007298184 claim priority from the GB, and although the GB has no "official" priority, it clearly belongs with the EP/US cases. In PatBase we give the first filed case in a family a priority based upon its application number.

Matters can become complicated when applications claim multiple priorities. This occurs frequently for chemical, pharmaceutical, and computer-based applications, particularly originating from the US. Typically, the applicant/assignee files a series of applications, some of which are abandoned before publication. All these applications are used as priority documents for later filed applications (sometimes known as continuations-in-part). FN=28265982, relating to an electronic interactive toy, is such an example, with multiple priorities. The original application was filed in 1995 but was abandoned. A further application was made in 1997, claiming priority from the 1995 application, and was subsequently published as US 5823782. Since then, several other US applications have been made, most of which claim priority from the original 1995 filing, but others only claim priority from subsequent filings. The priority map shows how the various publications are related by priority number.

Some databases only link families according to identical priorities (simple families). In PatBase we link families having one or more common priorities (extended families). The advantages of extended families are numerous:

- Family members do not become orphaned by virtue of an additional priority
- The searcher knows all the patents are related which increases efficiency
- The results are de-duplicated and pre-grouped

However, there is one potential issue: some families can become very large in PatBase. Where this occurs, we split the extended family into smaller simple families. Each simple family created in this way is provided with a link to the other members of the original extended family. Therefore, it is still possible to view all the members within a large extended family by clicking on the extended family link.

A further consideration in creating simple families relates to WIPO (PCT) documents. FN=43387800 is an example of a simple family within an extended family. However, as can be seen from the priority map of the above family, the priorities are not identical. This is because the international application number is sometimes used as an additional priority on regional/national phase documents originating from the PCT office. To ensure that these regional/national phase documents are correctly linked to their corresponding WO publication, we produce "intelligent" simple families, where the only difference in the priorities is the presence/absence of a PCT priority.

The current limit on extended families is 130 members. Any family larger than this is split into simple families. The long-term objective is to reduce this number to 100 as this is the consensus amongst our users.