Viktor Kaplan's patent database

The database presented, created on the occasion of the 150th anniversary of the birth of Viktor Kaplan, is the result of a five-year process involving the thorough digitisation of his personal archival fund in the collections of the Technical Museum in Brno (TMB). The fund mostly holds official materials that document Kaplan's efforts to obtain patents for his inventions, helped greatly by his assistant Ing. Jaroslav Slavík. In fact, it was he who donated these materials to our museum in the 1970s and helped organise them.

A close look at Kaplan's writings shows that his invention was not the result of a single flash of genius. It came from slow, painstaking work on improving the original Francis turbine, which eventually produced an entirely new type: an axial-flow reaction turbine that could be regulated exceptionally well. This made it ideal for rivers with a large, variable flow and a low head.

From a collection of more than 3,500 catalogued items, we selected 249 patents awarded to Viktor Kaplan in 25 countries around the world. To help researchers find their way around, the header of each entry holds a brief description of the relevant improvement (37 sub-inventions in all). Since our database can be rather difficult to search, we have prepared two easy-to-use lists for keen researchers:

1) A list of the countries in which Viktor Kaplan obtained patents for his inventions, supplemented by the inventory numbers under which the relevant materials are stored at the TMB.

2) A chronological list of Kaplan's inventions with the numbers of the patents awarded in individual countries and with the inventory number that the patent in question has in the TMB fund. If the patent number is blue, this means that the patent was awarded, but is not stored at the TMB.

Owing to limited storage capacity, each entry in the database includes only five digital images of the original patent. On request, we can give researchers access to a complete and detailed digital copy of the original. Notes provide researchers with the inventory numbers under which the supporting materials on the award of that particular patent are held (the patent application, the patent office's examination reports, any objections raised by opponents and Kaplan's responses to them, etc.). Also of interest is the impact of

international events, above all the First World War, on the process of awarding and prolonging patent protection. Although Austrian, Viktor Kaplan became a Czechoslovak in 1918, a fact to which he referred in his patent disputes.

The rise and fall of various state entities is also reflected in the documents of the period – for example, the creation of Yugoslavia and the Soviet Union, both now defunct, and the shifting unions of Nordic countries bring unexpected languages or names to the patent documents.

To bring Kaplan's importance to the attention of a wider range of researchers, we have prepared all accompanying texts and tables in Czech, German, and English.

Kaplans patent topics in chronological order

List of Viktor Kaplans Patents

Overview of documents on Kaplans patents

Viktor Kaplans biography