Elaphe Propulsion Technologies

Patent protection strategy (national, international and regional system)



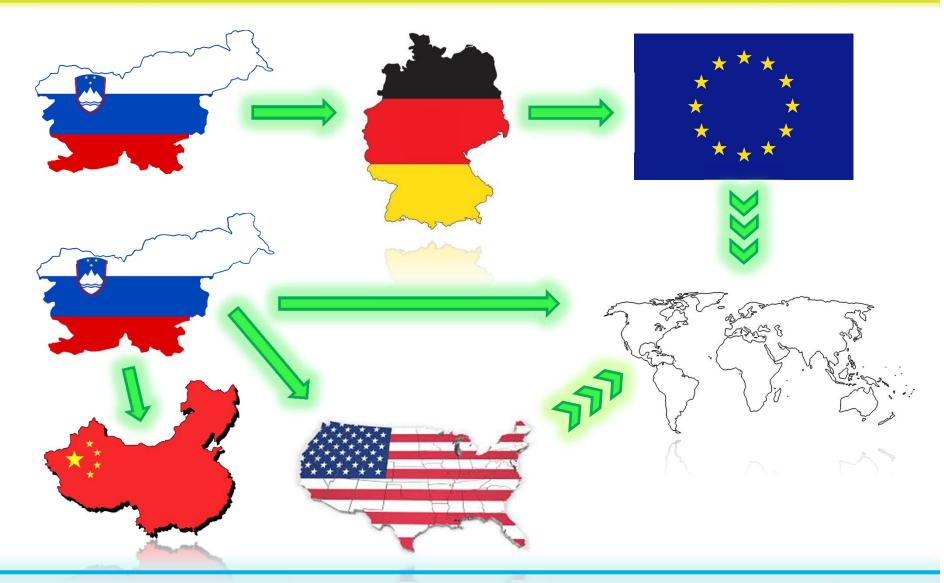
Patent strategy guides

- to stimulate new ideas, create new patents, and areas of improvement,
- to increase value of our company,
- to lower risks when entering into markets,
- to compare and contrast our company technologies with competitors
- to help our R&D projects by analysing competitors' technologies,
- to find useful patents for other divisions in our company for R&D brainstorming,
- to discover intelligence relating to patentability of our invention disclosure,
- to expand our core patent portfolio...



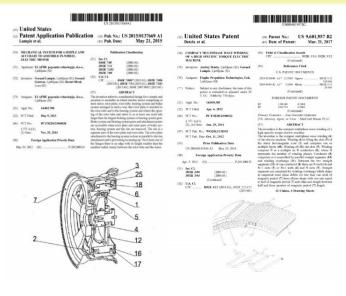


Patent area strategy

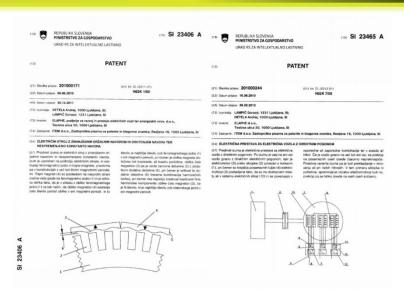




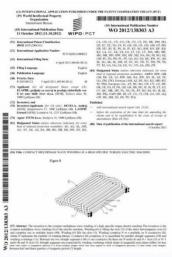
Patents and applications so far



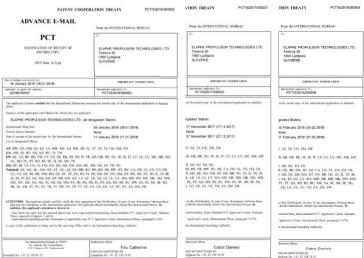
US granted: 2 SI granted: 2







WO pending: 8
EP pending: 3
US pending: 1
China pending: 1





Patent and application global statistics and trends

- more than 460k patent applications in the field of electric vehicles,
- about 200k patents in the field of electric propulsion,
- around 30k granted patents in the field of electric in-wheel propulsion solutions,

Trends (based on EPO analysis):

- 1. Renewable energies: Water, wind, solar;
- 2. Green battery technology: Longer lasting less toxic;
- 3. Biomass: A high-powered growth market;
- 4. Fuel cells: Ready to hit the road;
- 5. Water efficiency: Use, re-use, recycle.



Points 1,2 and 4 closely related to our field of technology.



Patent design procedures

Our patenting procedure comprises of:

- a. Collecting ideas
- b. Selection and sorting
- c. Creating a report
- d. Patent application creation







Collecting ideas

Ideas are shared through project management software where:

- ideas are open for discussion,
- transparent authorship and history are clear,
- various media types are supported (pictures, videos, links...),
- easy and quick transformation into tasks or projects is possible.





Selection and sorting

System of promoting the ideas:

- pending ideas (first level),
- ideas that everyone is talking about (second level),
- manifestation ready ideas (last level),

Ideas sorted into:

- potentially patentable ideas,
- know-how,
- plausible ideas that go to idea vault,
- "busted" ideas.





Creating a report

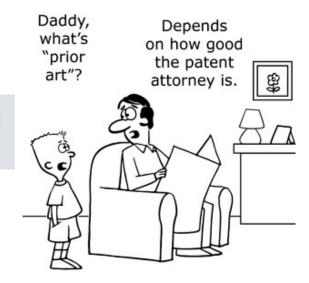
A record of invention is prepared for every potentially patentable idea where:

- definition and description of the technical field is written,
- state of the art analysis is carried out,
- a critique of prior art is added,
- benefits of our idea are clarified,
- clear patentable solution is determined.











Patent application creation

Usual phases of patent application creation:

- writing of the "monster" claim,
- forming independent & dependent claims structure,
- building a background section based on prior art,
- expanding claim content and adding extra clarification in description,
- creation of drawings, reference numbers are added,
- checking and editing overall application form in accordance with the guidelines.





Our patenting experiences

Experiences summarized:

- frequent patent strategy adaptations and balancing needed,
- high cost of patent office services, reducing them with inhouse patent design,
- PCT path is currently most optimum path for our patents with emphasis on available time for making changes to the application and parallel adaptation of patent strategy,
- EP application high costs, unitary patent system needed,
- implementation of patent chaining strategy.



Thank you for your kind attention





