Case Study

Paving the way to success by building up an IP strategy for an academic start-up

May 2016

Company details

Name: doctorVOX

Business sector: Medical devices

Type of company: Start-up

Website: www.doctorvox.co.uk

1. Background

2014 was the year when Assistant Professor Ilter Denizoglu started to reap the benefits of his efforts in his studies. He was practising on phonosurgery and voice therapy in Ege University in Turkey and he came up with the idea of providing voice therapy and vocal humidification by means of a medical device.

This device was designed for patients having difficulties in speaking and habilitation of professional voice users such as actors, speakers, sound artists and whoever uses their voice in their work.

The invention was obviously successful as it was bringing together two different scientific disciplines; otolaryngology¹ and vocology² in an easily portable and safe device.

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¹ A medical discipline dealing with ear, nose and throat diseases.
² A scientific discipline dealing with habilitation of human (and animal) sound making systems.
2. Problem faced and given support

Mr. Denizoglu was unsure about the path to commercialisation of his early-stage invention and applied to EBITTEM-TTO to seek assistance on how to proceed with possible exploitation strategies for this invention.

Ege University EBITTEM Technology Transfer Office (EBITTEM-TTO), a member of Enterprise Europe Network\(^3\) in Turkey, provides one-stop-shop support for delivering the whole range of technology transfer services, particularly to foster university-industry collaboration.

After an initial assessment of the invention pre-disclosure, Mr. Denizoglu was given full support, particularly on the following particular aspects:

- **Patent search including freedom-to-operate (FTO) analysis**: Prior to filing of a patent application, it is crucial to conduct a patent search to check whether any similar invention already exists\(^4\). Such a search not only evaluates the chances of getting a patent grant but also constitutes the state of the art when drafting the application. Along with the patent search, carrying out an FTO analysis, aiming to determine whether the product could infringe third parties' rights, is always a wise step to help ensure the success of the upcoming commercialisation process.

- **Patentability analysis and assessment of commercial potential**: Another core stage to be followed before applying for a patent is called patentability analysis. In this study, the invention subject to the application is assessed according to its novelty, inventive step and industrial applicability to evaluate the chances of patentability. Patentability analysis also helps the inventors to make a go/no-go decision on investing additional time and money on the invention\(^5\).

- **Official invention disclosure to the technology transfer office**: When inventors do not have enough technical capabilities for the exploitation of an invention, working with a technology transfer office can be a reliable option. Once the invention is disclosed to the TTO, consequent to previous positive analysis, the experienced TTO staff start working on taking the necessary steps on behalf of the inventor to evaluate and exploit the invention\(^6\).

- **Industrial design support for prototyping**: Prototyping is one of the stages for verification of the industrial applicability of the invention. In this phase, it is better to work with industrial designers to have their comments on the adaptation of the product to the market. Many TTOs have expertise or

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\(^3\) For more information about Enterprise Europe Network and to find your local contact point please click [here](#).

\(^4\) The European IPR Helpdesk has published a fact sheet on how to search for patent information, available [here](#).

\(^5\) The European IPR Helpdesk’s fact sheet on automatic patent analysis, available [here](#), may be of help for this step.

\(^6\) EBITTEM-TTO offers the possibility to hold patents and further provide licences for their exploitation.
networks for accessing industrial designers or industrial designers’ networks.

- **Filing the patent application:** Patents (like trade marks and designs) provide territorial protection, which means that they are only valid in the country or region in which they have been filed and granted. Therefore, the inventors should consider protecting their patents in each territory in which they are planning to enter and have business activities. There are several ways to protect intellectual property rights (IPRs) in different countries, such as filing individual applications, regional routes or international routes depending on the results of patent search and patentability analysis performed in previous steps.

- **Protection of know-how:** Contrary to patents, know-how information is protected without registration, meaning that it is protected without any procedural formalities. Although this simplifies protection procedures, having no registration steps might make the protection of know-how somewhat unclear and likely to be neglected. However, since know-how is generally the main competitive edge against competitors and is complementary to the patent itself, particular attention (especially in identification of know-how and its protection) should be paid to these intellectual assets.

- **Exploitation strategy:** Developing a sound and elaborated exploitation strategy is the key for market success. As the strategy depends on several factors such as the products or services to be exploited, IPRs, business targets, financial powers, business competencies, target markets, competitors, etc., an extensive study on deciding the exploitation strategy must be carried out. Such a study might result in the establishment of a start-up, granting licences or the complete assignment of rights, etc. For example, if there is a lack of sufficient financial or technical capabilities for marketing, granting licences can be an option. On the other hand, especially for researchers, establishing a start-up company can be another route for moving from the academic world to the business world.

Following the series of consultancy and mentoring support, a new patent-pending medical device, with a given name of doctorVOX, was ready for the market with a complete IP exploitation strategy in line with the inventor’s business expectations.

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7 The European IPR Helpdesk has published a fact sheet to guide entrepreneurs on how to manage Intellectual Property Rights (IPR) when entering into foreign markets, which is available [here](#).

8 Keeping the information as secret, internal procedures, specific agreements, clauses in contracts, etc. are generally used to protect know-how.

9 The European IPR Helpdesk’s guide on IP commercialisation provides some facts about different ways to commercialise your IP assets. The guide can be downloaded [here](#).
3. Outcomes

doctorVOX supports motor-learning and cognitive processes involved in voice therapy and vocal training, and provides instant humidification of the vocal folds. For voice therapy and professional voice development, doctorVOX uses the mechanisms of the LaxVox Voice Therapy Technique, which has also been developed by the inventor.

Given the potential of the developed technology and the patent rights comprising the PCT application, Assistant Professor Denizoglu decided to lead a start-up named doctorVOX with the goal of marketing the successful product based on these innovative assets. Although it is in a somewhat niche market, doctorVOX focuses on becoming a leader company in the vocology market.

EBILTEM-TTO has licensed the patent rights to doctorVOX to enable its commercial activities and the company started to generate revenues through online sales and know-how transfers from the first patented voice therapy device in the world!

4. Lessons learned and suggestions

 ✓ Close collaboration between the inventor, patent professionals, and technology transfer experts is important for successful patent applications to maximise their commercial impact.

 ✓ Before taking the steps for exploitation and developing the relevant strategy, there are several points to be considered for safeguarding the IP. Conducting patent searches and patentability analysis, running an FTO analysis, invention disclosures, support for prototyping and filing the IPR applications are of essential importance in the pre-marketing stages.

 ✓ Other forms of IP, particularly know-how, should be considered, as patents are not solely sufficient for building up a comprehensive exploitation strategy. It should be supported with valuable know-how for sustainable business success.

 ✓ Implementing lean start-up methodology and an effective IP strategy are very important for product development phases before entering the market and managing the whole commercialisation process.
GET IN TOUCH

For comments, suggestions or further information, please contact

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The European IPR Helpdesk aims at raising awareness of Intellectual Property (IP) and Intellectual Property Rights (IPR) by providing information, direct advice and training on IP and IPR matters to current and potential participants of EU funded projects. In addition, the European IPR Helpdesk provides IP support to EU SMEs negotiating or concluding transnational partnership agreements, especially through the Enterprise Europe Network. All services provided are free of charge.

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