

Profile View

Details

Title: E-health hardware and software for a secure and optimal communication between doctor and patients or health professionals to provide remote support in telemedicine, assisted surgery and health education

POD Reference: TOES20210609002

Summary: A Spanish company, specialising in software, has developed a comprehensive solution that allows communication, sharing real time video and audio with multiple tools, which thanks to augmented reality Internet of Things and wearables, facilitates the support and execution of remote activities such as expert assisted surgery and health education, without cost or trips, and generating evidence of the work performed. The company is looking for license agreement.

Description: Digital technology is advancing exponentially and its cost is plummeting. At the same time the demand for and cost of healthcare is rising, which is challenging most health economies across the world. The need to adopt technology to help meet this challenge seems obvious, but healthcare continues to lag behind other industries in using technology with service, in this case, patient and carers.

In this context, this Spanish company was founded in 2014, by experts in innovative eHealth and Industry 4.0 projects. The aim of software solution offered is to allow the communication from anyplace of the world, sharing real time video and audio. Allowing give instructions and precise indications using augmented reality and its multiple functionalities.

It is an agnostic solution because works with any mobile device, computer and wearables (Smarthglasses, smartwatches, etc), which give it an advantage and versatility when a company decide include it in their devices.

It is thought to be used in e-Health sector addressing different needs:

- **Telemedicine:** Allow the communication between patients and health professionals in different locations. It is multidevice to facilitate the connection between patient and doctors from anyplace in anytime.
- **Specialist medical consult:** Consult between patient and health personal (doctor, insurance's personal, nursing or another specialist) with remote access to integrate a specialist doctor during the medical

consultation, reducing the waiting time for consultation and avoiding unnecessary move.

- Collaborative medicine: Teleconferences between health professionals for remote advice to others partners in new surgical techniques and treatments or to do remote diagnostics in a multidisciplinary committee.
- MedTech equipment support: Facilitate real time the communication with internal and external experts for troubleshooting and support in maintenance task of Medtech equipment that is critical for diagnosis and treatment, improving the availability of the equipment and reducing possible breakdowns without having to travel.
- E-Learning: online trainee of sanitary personnel through audio and video streaming with an expert using and explaining over images in real time, and vice versa, so the expert can follow the students in real time from other localizations. Easier with smart glasses.
- Assisted surgery: Remote help and advice in real time to the professional in the middle of surgical intervention through surgeon expert and others surgical specialist, integrating all operating room signal emitting devices (e.g., laparoscopy, operating room camera, monitored constants, etc.)

The solution guarantees a communication with precise instructions due to the augmented reality functionalities like the drawing or writing text over the video and the digital pointer, as well as the option to add more participants, use the mosaic view and share documents. Other features that favour the quality of the instructions are remote control of the optical zoom, the flashlight and the secondary cameras (laparoscopic, operating room, pan-tilt-zoom camera (PTZ), 360°...).

Also, it is possible to follow the issues treated during the calls doing an evidence record through the images capture or video in anytime, as well as its post review in the session history that the solution offer, with all the necessary data of each call: attendance, folder shared, evidence and written messages.

This solution has been successfully implemented in the health sector providing better quality services. Therefore, the company is looking for increasing its international business development by seeking international ICT integrators willing to collaborate under license agreements.

Advantages and Innovations:

There are other similar platforms in the market. Nevertheless, in this solution are integrated several tools and methodologies than usually are offered by separated.

Furthermore, this solution includes the following competitive advantages to the state of the art:

- Collaborative medicine: allows a communication between several professionals and specialists to work collaboratively and to be able to advise, indicate or reach a joint agreement in issues related to the diagnosis of patients, treatments or new techniques made
- Training for Professionals: Distance training for healthcare personnel, thanks to video and audio broadcasting and the possibility of giving instructions with text or video marking in real time or the reverse function, which allows the expert to follow what the students are doing live from other places allowing them to correct or advise them.
- Assisted surgery: Facilitates assisted surgery, allowing expert surgeons and other specialists in the surgical field having access to signal emitting of operating room devices (e.g. laparoscopy, operating room cameras, monitored constants, etc.), allowing them to advise surgeons and other health professionals operating in the operating room in real time
- Solutions adaptable: It is a flexible solution that can be adapted to key players inside the e-health value chain.

Stage of Development: Already on the market
 IPR status:: Secret Know-how
 Profile Origin: Private (in-house) research

Keywords

Technology Keywords: 06005002 Sensors & Wireless products
 Market Keywords: 02006009 Other computer services

Partner Sought

Type and Role of Partner Sought:

The final customers are companies in the health sector or hospitals that are looking for the best technological solutions for implementation in operating theatres, consulting rooms, etc. As well as offering better patient care or a new way of remote training.

Therefore, the ideal partner could be wearables or digital transformation companies that want to extend their offer with a solution that allows them integrate the connected patient through a single technological platform. In this context, the Spanish company is looking for international ICT integrators, willing to cooperate under license agreement.

Type of

Partnership

License agreement

Considered:

Client**Type and Size of Client:**

Industry SME 11-49

Year Established: 2014

Turnover (euro): 1 - 10M

Already Engaged

in Trans-National No

Cooperation:

Languages English

Spoken: Spanish

Client Country: Spain

Dissemination

Relevant Sector Healthcare

Groups: ICT Industry and Services