

CLEVERSCOPE: device to transform a conventional laryngoscope into a videolaryngoscope

DESCRIPTION OF THE TECHNOLOGY

The Medical Research Institute Hospital La Fe and the Plastics Technology Centre have developed a device that can transform a conventional laryngoscope into a video laryngoscope.

The device is a low weight and volume plastic piece, which can be fastened to the distal end of the blade of any laryngoscope. Its features allow high portability.

The device has been made with plastic materials with specific elastic properties that allow its adaptation to any model and size of a laryngoscope blade Macintosh type (the blade most commonly used in hospitals). The design allows its insertion into different devices to obtain a continuous image of the airway during direct laryngoscopy, transforming a regular laryngoscope into a video laryngoscope. The fastening system is nearly perfect, and positioning the imaging system used in the right place, increases the ease and convenience of use and the success rate in the visualization of the glottis (which facilitates intubation).

The new device would make a most affordable videolaryngoscope because the acquisition costs are reduced and it can be used with other existing technologies in hospitals as fiberscopes, videoscopic towers or a low cost micro usb connected to mobile devices (Smartphone, Tablet, laptop, micropc...)

MARKET APPLICATION SECTORS

Biomedicine sector. At hospital or non-hospital area, professionals who require to secure the airway by endotracheal intubation.

Professionals who usually perform tracheal intubations are: Doctors Anesthesiologists (surgery room), intensive care physicians (in any ICU), emergency physicians (Medical emergencies, Municipal Emergency Assistance and Rescue Service) ...

TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

Potential sales volume.

An average of 9 anesthesia per 100 inhabitants are performed in Spain (47 mill. Inhabitants) Therefore 4,100,000 anesthesia are performed annually. These situations are potential situations where the device could be used.

In Spain there are 787 public and private hospitals (2014).

A tertiary hospital performs an average of 15,000 tracheal intubations per year (depending on hospital size).

Low cost of production with large profit margin per unit.

Current videolaryngoscopes have very high prices from 1500 to 14.000euros. The production cost of the device would be so low that would compete directly with them also getting a great profit margin.

Scalability of the product.

Sales can be diversified with different options based on the same product, the device alone for fiberscopes, the embedded device with a low cost system or the embedded device with high quality video system. Allowing each user to adapt the device to his necessities. The device, due to its characteristics, could be exported to emerging countries, or with a low income per capita due to its low cost.

CURRENT STATE OF DEVELOPMENT

The device is at an advanced stage of development. A fully functional prototype is available, which has been validated on mannequins.

The pending development for commercialization is to validate its safety and effectiveness through a clinical trial in order to obtain the CE mark. Subsequently, a non-inferiority trial regarding Glidescope (video laryngoscope

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prestigious) could also be conducted.

INTELLECTUAL PROPERTY RIGHTS

This device has protection as a utility model.
Registration number: U201630976
Priority Date: July 28, 2016

COLABORATION SOUGHT

Company willing to sign a license agreement to develop the product, the company should assume production and obtain the CE mark for further marketing and distribution.

RELATED IMAGES

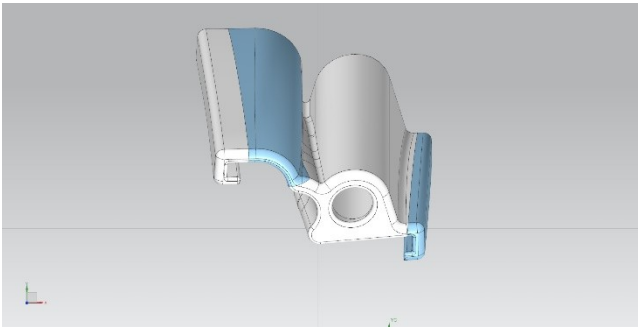


Image 1: Device

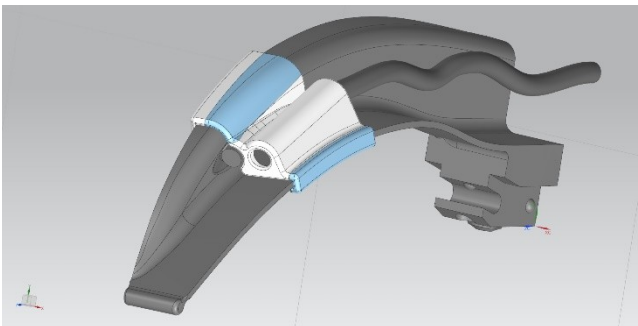


Image 2: A device attached to the laryngoscope blade

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