# MedIComm

Medical Innovation & Commercialisation Accelerator Programme

# **Intellectual Property Portfolio**

WO2018203073A1

# **Novel Tracheostomy Device**

The Medical Innovation and Commercialisation Accelerator Programme is proud to present its portfolio of Intellectual Property which covers a wide range of medical and clinical technologies. Each technology shown on the portal is available for licensing.



## **Summary**

Title of the patent: Novel Tracheostomy Device

### **Intellectual Property Right:**

Patent

### License(s) available:

- Academic/Non-commercial
- Commercial
- Evaluation
- Start-up

## **Details**

### Legal Status:

GB - Granted USA - Pending Europe- Pending

Published as: WO2018203073A1 Status: Available for exploitation

Priority date: 03/05/2017

#### Application

The Tracheostomy airway device can be used in a clinical environment within medical facilities, or in the field in emergency situations.

#### Introduction

In some circumstances, where a patient's airway is obstructed, a doctor may need to perform a tracheostomy to enable the patient to breath. Examples of these circumstances include severe facial trauma, tumours of the head and neck or for patients in need of long-term mechanical ventilation.

In a tracheostomy, an airway device (tube) is placed into the trachea to serve as an airway to bypass the blockages.

Clinicians at Lancashire Teaching Hospitals NHS Foundation Trust have developed an improved tracheostomy airway device (tube).

#### Description

When a tracheostomy has been performed, one complication that can occur is that the tracheostomy airway device can be dislodged from a patient. Various factors that can increase the risk include morbid obesity, a short or thick neck, a goitre, prior surgery on the neck, the device being connected to ventilator tubing, patient movement, frequent coughing and inadequately secured tubes.

Complications of a dislodged airway device are many, including a loss of airway. It is conventional, therefore, for clinicians to take great care securing tracheostomy airway devices to the neck of patients in order to reduce the risk of dislodgement and to be vigilant in respect of the causes of dislodgement and indication that dislodgement has occurred.

Our research provides a tracheostomy airway device which is removably attached to the patient's trachea in such a way that the device cannot be inadvertently dislodged or removed. The tracheostomy airway device is arranged to perform this in a simple mechanical manner which provides a device that is easy to manufacture, and use.

Market analysis has identified an opportunity for innovations in this space as well as for lower priced devices.

Additional work is ongoing in relation to this project, so there is potential for collaboration on further developments with an option for a commercial licence to bring the device to market.

#### **Core Advantages**

The tracheostomy airway device that has been developed is designed to be secured through a novel mechanism - providing one or more retention members which are movable relative to the outer cannula between a retracted configuration in which the tracheostomy device is insertable into, and removable from, the trachea of a patient, and an extended configuration in which the one or more retention members impede removal of the tracheostomy airway device from the trachea.

Furthermore the design potentially costs less to manufacture and therefore could translate to lower retail prices on the market.

The full patent submission can be seen **here** 

If you would like to discuss licensing this or any other MedlComm asset, please contact:

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