

# SafeGuard-BR system

Sealed intubation system with improved respiratory tract access for examination equipment

## Invention

Many patients underlying artificial respiration – especially COVID-19 patients – suffer acute respiratory distress syndrome (ARDS), the treatment of which requires pressure-controlled respiration with positive end-expiratory pressure (PEEP) and humidified, temperature-controlled ventilation air.

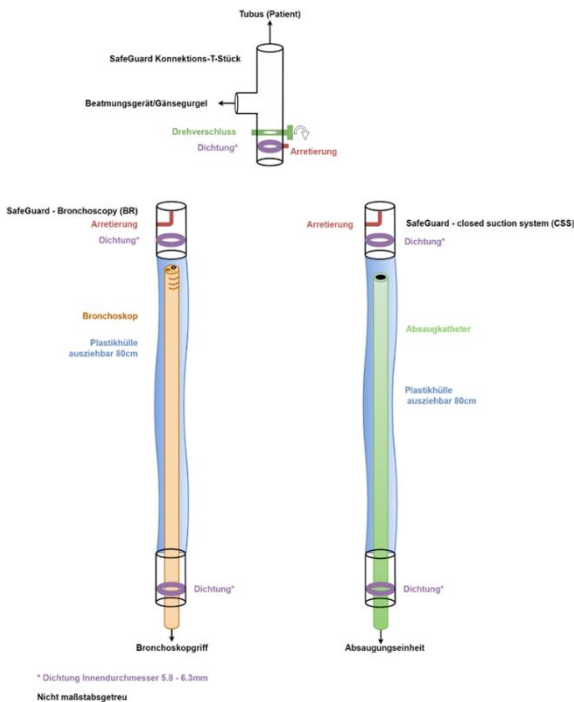


Figure 1

## Current Status

Initial data on model trials and illustrative films on practicability are available.

## Relevant Publications

Koehler P, Cornely OA, Kochanek M. Bronchoscopy safety precautions for diagnosing COVID-19 associated pulmonary aspergillosis – a simulation study. Mycoses 2020.

An invention of University Hospital Cologne.

During intensive-care treatment, bronchoscopy with bronchoalveolar lavage (BAL) is regularly used during acute treatment and sample collection. During emergency situations, such as bleeding and airway obstruction, bronchoscopy must be performed quickly. The closed respiration system is opened and the necessary examination performed, releasing aerosols and droplets into the ambient atmosphere. This involves a significant exposure risk in cases of infectious diseases (SARS-CoV-2, MERS, influenza, tuberculosis etc.) to medical health personnel directly involved.

## Commercial Opportunities

This invention provides a sealed respiration system that allows hygienic, protected performance of intensive-care examinations without releasing aerosol particles or droplets into the ambient atmosphere.

## Competitive Advantages

- Allows hygienic work during bronchoscopies
- Protects health personnel
- Avoids contamination of the environment
- Compatible with other surgical devices

## Technology Readiness Level

123456789

Technology validated in relevant environment

## Industries

- Medical technology

## Ref. No.

6067

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