Endobronchial tube blocker

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Market Needs:

Current endobronchial blockers have two major drawbacks:

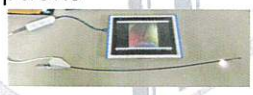
1. Lack of image monitoring capability: Existing products lack built-in imaging functions for monitoring the position of the blocker, confirming its correct placement, or enabling adjustments during surgery. As a result, an additional small bronchoscope must be inserted into the endotracheal tube for verification. However, the limited space inside the endotracheal tube often makes this process inconvenient. Clinical data indicate that over 90% of physicians encounter this issue.
2. Limited flexibility and operational challenges: Most endobronchial blockers are made from rigid plastic, making them difficult to maneuver. This rigidity often necessitates surgical interruptions for intraoperative adjustments. These limitations highlight an urgent need for improvements in the design of endobronchial blockers to better meet the needs of the medical community.

Our Technology:

This technical field pertains to auxiliary medical devices, specifically an innovative endobronchial blocker. The device integrates advanced solutions to address clinical challenges associated with traditional endobronchial blockers. By incorporating a low-cost sensor and a bendable head design, it enhances the applicability of the blocker, enabling flexible angle adjustments for precise positioning during intubation and significantly reducing the risk of surgical interruptions.

Strength:

- ✓ More than 35% of the operating space is released for more flexible operation.
- ✓ Continuous monitoring reduces surgical interruptions
- ✓ 67% faster operating time
- ✓ Surgery costs will be reduced by 32%



Competing Products:

	NTU BLOCKER EYE (本團隊)	Ambu VivaSight™ 2 DLT	COOK Arndt Endobronchial Blocker
BLOCKER function	Yes(單腔)	Yes(雙腔)	Yes(單腔)
Continuous image monitoring	Yes	Yes	No
bendable	是(雙向60°)	No	No
respiratory damage caused	低	高	低
Displacement early warning detection	Yes (0.5cm)	No	No
COST	300 USD	299 USD	90 USD

Intellectual Properties:

專利類別	專利名稱	申請號	申請日期	申請人	申請國家	專利發明人	計畫補助經費來源(部會、計畫名稱及計畫編號)	專利授權狀態 若已授權需說明專屬或非專屬授權、授權範圍、地區、金額	佔此計畫申請標的之技術佔比(%)
發明專利	ENDOBRONCHIAL BLOCKER	63/567,771	113年3月20日	台灣大學	美國	吳峻宇	NSTC112-2926-B002-001	尚未授權予任何人使用	100%

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