



Image-guided Robot-assisted Intervention system

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Experience:

https://www.ntuh.gov.tw/surg/Vcard.action?q_type=-1&q_itemCode=12

Market Needs:

Image-guided intervention is the current trend of cancer treatment, and it can be applied to many types of solid organ tumors such as liver cancer, lung cancer, and pancreatic cancer. At present, more than 10,000 liver and lung cancers are diagnosed every year in our country, and all these patients with different cancer staging have indications for intervention therapy. Being the common image device, computerized tomography (CT) has been increasingly used for image-guided intervention treatments. In addition, the clinical demand of CT-guided fine needle localization for small lung cancers is increasing. The entire global markets are expected to exceed ten million dollars, and the robot-assisted automatic intervention system will be introduced into the market along with the imaging devices.

Our Technology:

Our technology uses intraoperative CT images to locate the needle path provided by the robotic arm. It also control the robotic arm based on the acquired CT images. The robotic arm can provide the stable and unidirectional path for intervention.

Strength:

This technology can be used with different CT systems, and it can be applied to interventions for different organs. The technology provided in-time adjustment of robot arm for needle path once the target shift occurred.

Competing Products:

ROSA ONE® Brain - Zimmer Biomet

DEMCON NPS

GUIDOO BEC-KUKA

Intellectual Properties:

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NUMBER: 16528250

TITLE: A ROBOTIC ARM

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