ARTHROSCOPIC EXTRUDER

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Invention

Endoscopic surgical techniques, where possible, have significant advantages over standard surgery such as aesthetic micro-invasiveness, speed of recovery, shorter duration of operations with the relative benefits as regards the type of anesthesia.

During endoscopic surgical operations, especially those for the regenerative treatment of worn cartilage, it is often necessary to deliver a drug and / or a regenerative substance to the restricted site of intervention. The prior art devices also allow to simultaneously extrude up to three different therapeutic substances at the same time, but do not give the surgeon the possibility of directing their application except by hand by moving the application nozzle with the arm.

The object of the invention is a tool, new of its kind, to deliver therapeutic substances (e.g., biomaterials, stem cells, etc.) during arthroscopic micro-invasive surgery.

This innovative device has the ability to direct the extruder in order to improve and maximize the efficiency of the application by the healthcare professional.

Advantages of the proposed solution are:

- Ability to direct the medical application on site thanks to the mobility of the extruder
- Simplification of operations in arthroscopy
- Ability to microstructure the material delivered in concentric layers that maximize its functionality

Drawings & pictures

Fig. 4

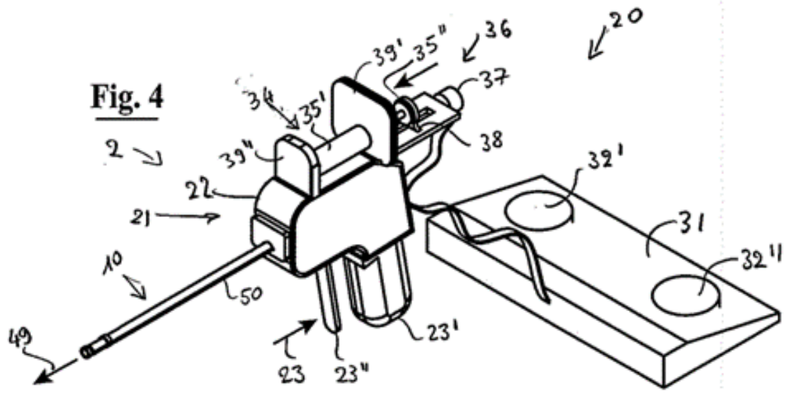
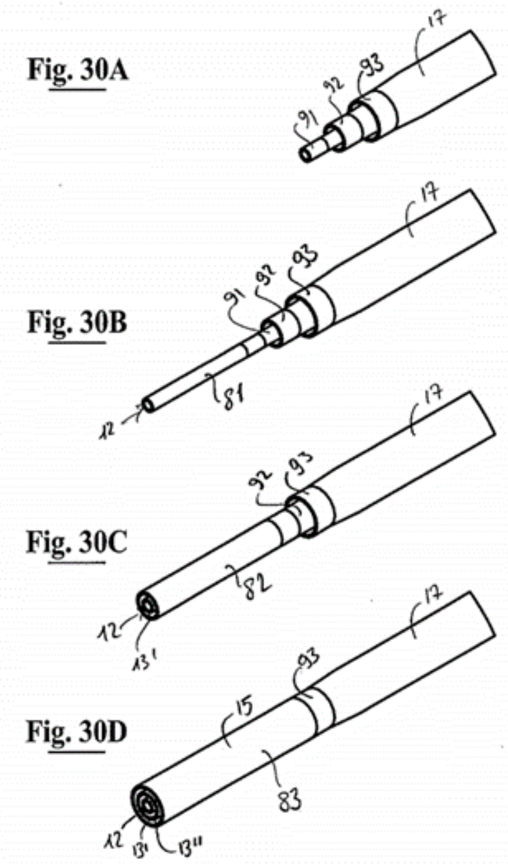


Fig. 30A

Fig. 30B

Fig. 30C

Fig. 30D



Industrial Apllications

Application of biomaterials, stem cells and other therapeutic substances during arthroscopic interventions

Possible developments

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The research group is open for discussions with industrial partners interested in licensing the technology covered by this patent.

For more information:

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