



Istituto di Tecnologie Industriali e Automazione
Consiglio Nazionale delle Ricerche

from research to market



**A vacuum manipulation device and a
method for manipulating a component by
means of a vacuum**

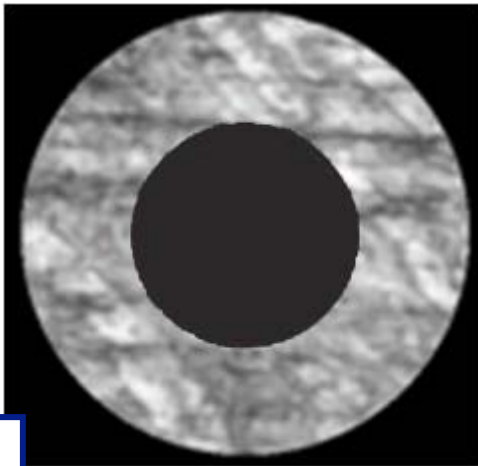
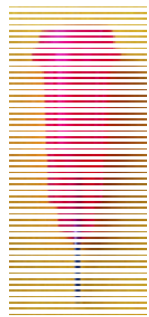
European patent No. EP2978570 B1

S. Ruggeri, G. Fontana, I. Fassi, C. Pagano, G. Legnani



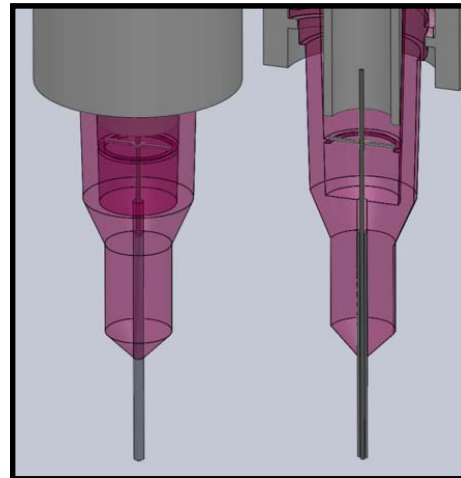
THE GRIPPING TOOL

- Development of an innovative vacuum gripper with mechanical release system (patented)
- Comparison between *innovative* and *conventional* vacuum grippers



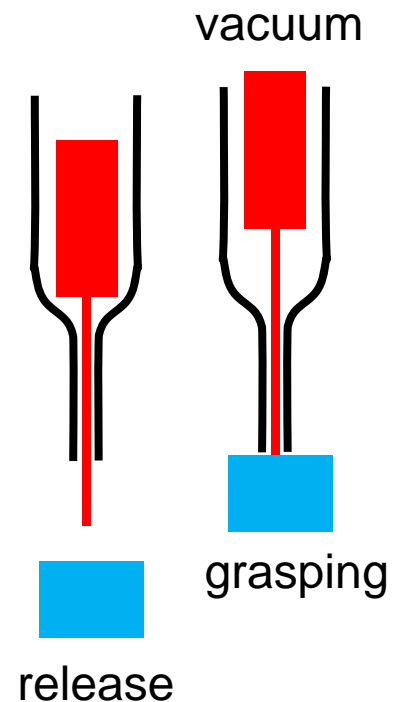
BOTTOM
VIEW

Conventional
Gripper



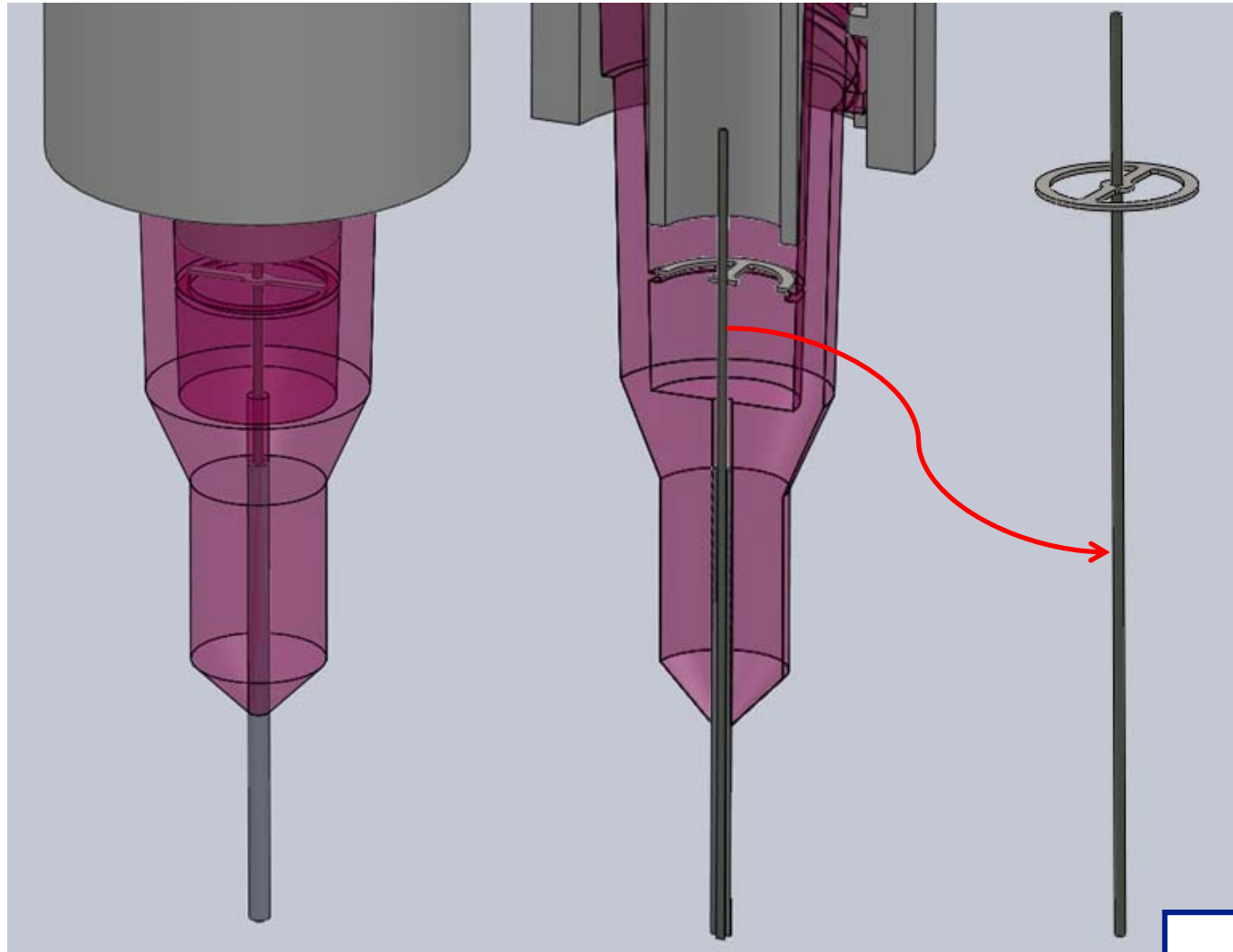
Innovative
Gripper

Patented





THE INNOVATIVE VACUUM GRIPPER



Possible
but not
unique
design

Patented
EP2978570



EXPERIMENTAL SETUP AT ITIA-CNR LAB

1. Gripper
2. Robot
3. Camera
4. Macro lens
5. Mirror at 45°

