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(54) **CATHETER INSERTION DEVICE**
(75) Inventors: **Kevin Woehr**, Felsberg (DE); **Kenneth C. Raines**, Bethlehem, PA (US)
(73) Assignee: **B.Braun Melsungen AG**, Melsungen (DE)
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(58) **Field of Classification Search** **604/110, 604/167, 263, 533, 164**

See application file for complete search history.

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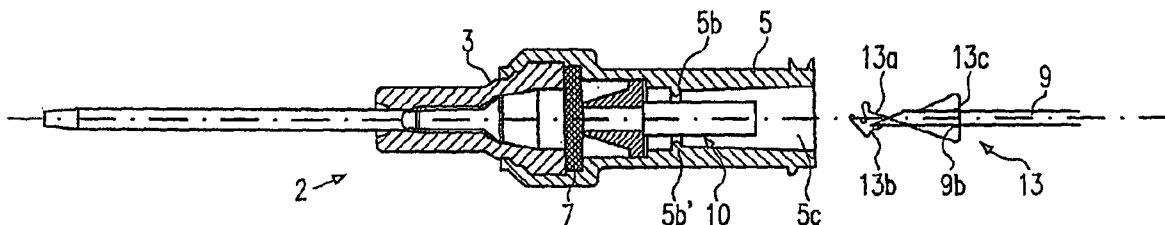
Assistant Examiner—Michael J Anderson

(74) *Attorney, Agent, or Firm*—Klein, O'Neill & Singh, LLP

(57) **ABSTRACT**

The invention relates to a catheter insertion device comprising: an approximately hollow cylindrical catheter sleeve (2), at whose distal end a catheter (4) is attached; a needle sleeve (8) with a hollow needle (9), which is attached thereto and which, when ready for use, extends through the catheter sleeve (2) and the catheter (4), and; a needle protective element (13) that is arranged inside the catheter sleeve (2) while being able to move on the needle (9). Said needle protective element has an engaging section (13c) that engages with an engaging device (9b), which is formed in the vicinity of the needle tip, when the hollow needle is withdrawn from the catheter sleeve (2). A check valve (7, 17) is placed inside the catheter sleeve (2) between the catheter (4) and the needle protective element (13). The hollow needle (9), when ready for use, extends through said check valve, and the check valve automatically closes once the needle is withdrawn.

25 Claims, 3 Drawing Sheets



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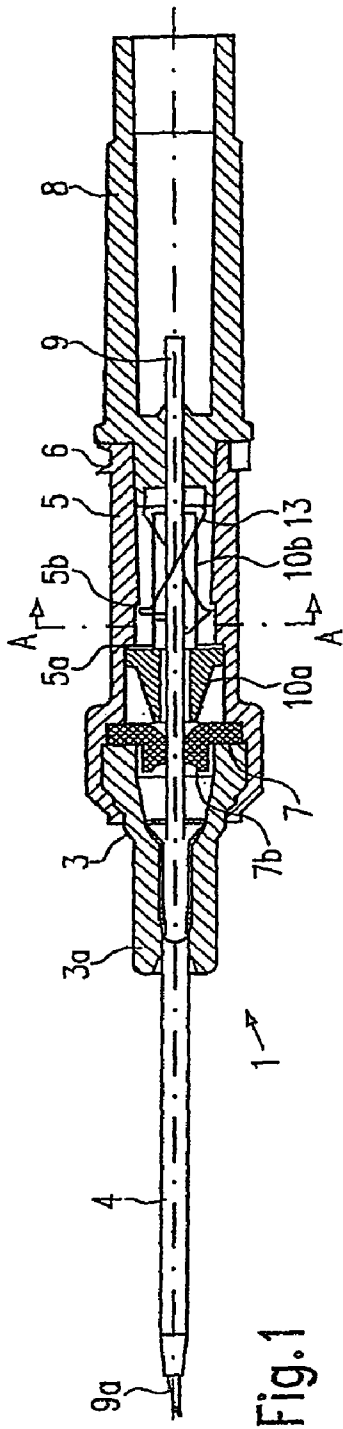


Fig. 1

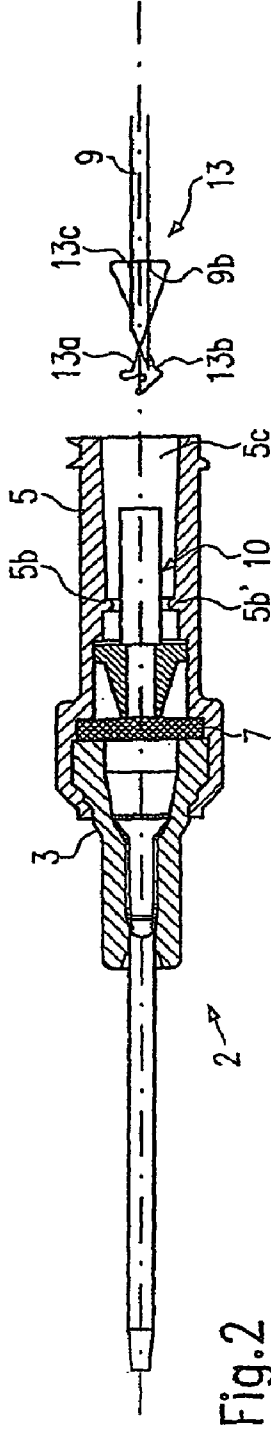


Fig. 2

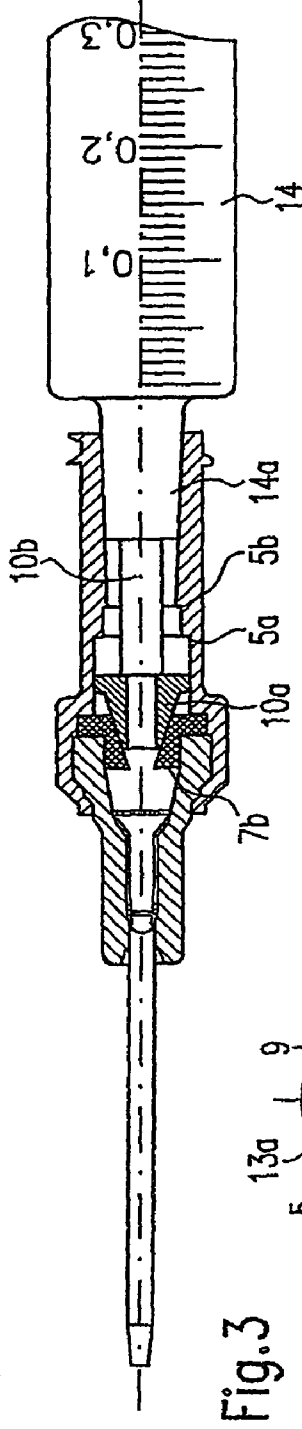


Fig. 3

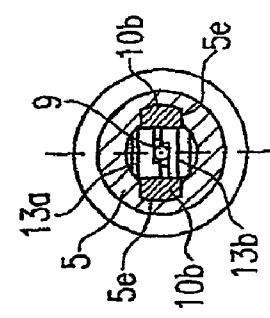


Fig. 4

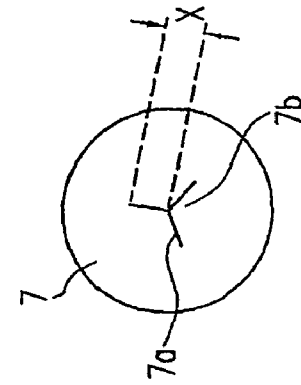


Fig. 6

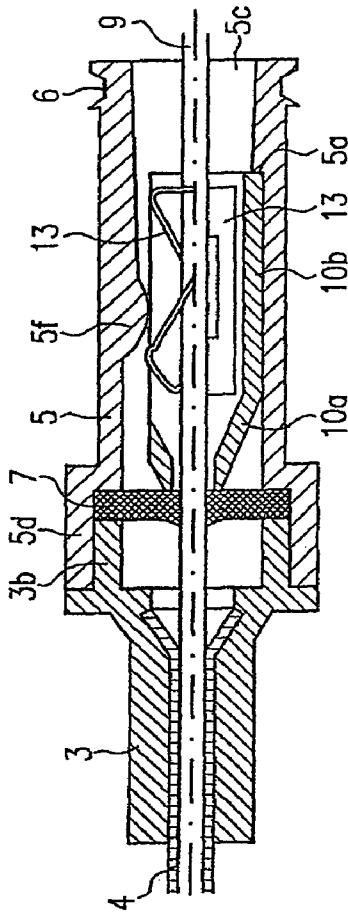


Fig. 5

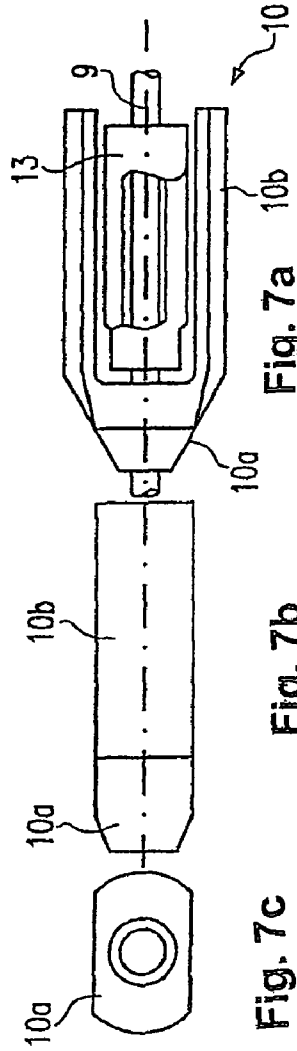


Fig. 7a

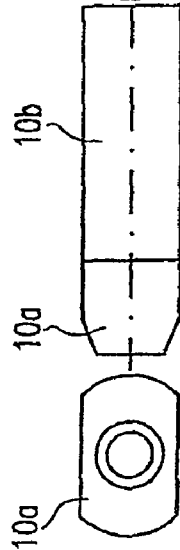


Fig. 7b

Fig. 7c

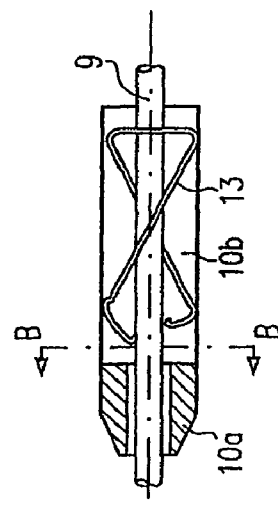


Fig. 7d

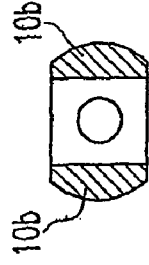


Fig. 7e

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