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(51) INT CL<sup>5</sup>  
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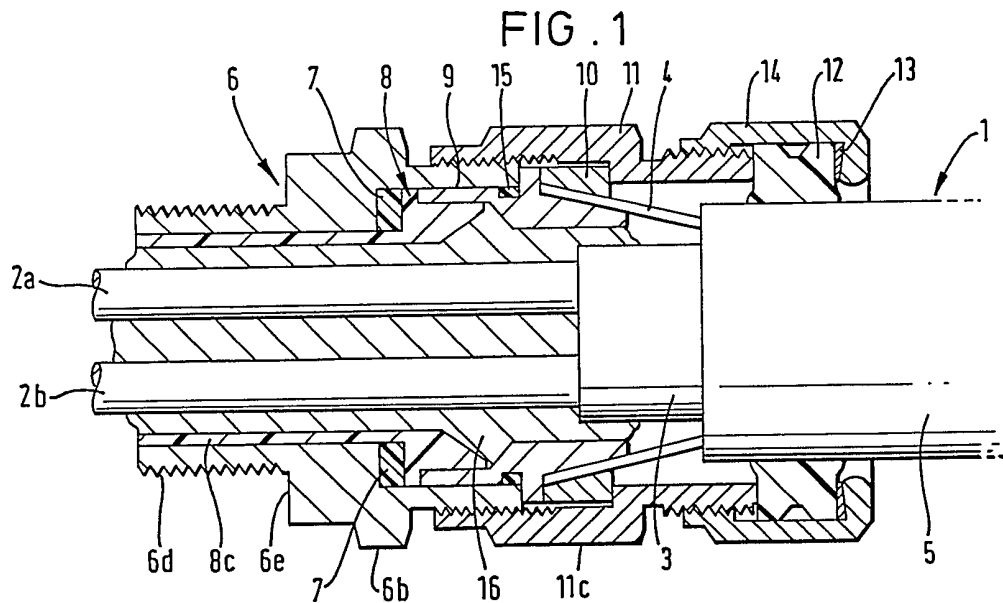
(52) UK CL (Edition L)  
H2E EGCA

(56) Documents cited  
GB 2138218 A GB 2104311 A GB 2074395 A  
GB 1528347 A GB 1524684 A GB 1204767 A

(58) Field of search  
UK CL (Edition K) H2E  
INT CL<sup>5</sup> H01R, H02G

(54) Electric cable barrier gland

(57) An electric cable barrier gland in which hardenable compound (16) surrounding the core (2a, 2b) of a cable (1) extending through the gland is confined by a barrier sleeve (8) located in an entry body (6) and a seal (7) is mounted on a cylindrical sleeve portion (8c) of the barrier sleeve (8) between opposed shoulders of the barrier sleeve (8) and entry body (6) to close any clearance fit gap therebetween. The barrier sleeve is of metal or transparent or translucent plastics.



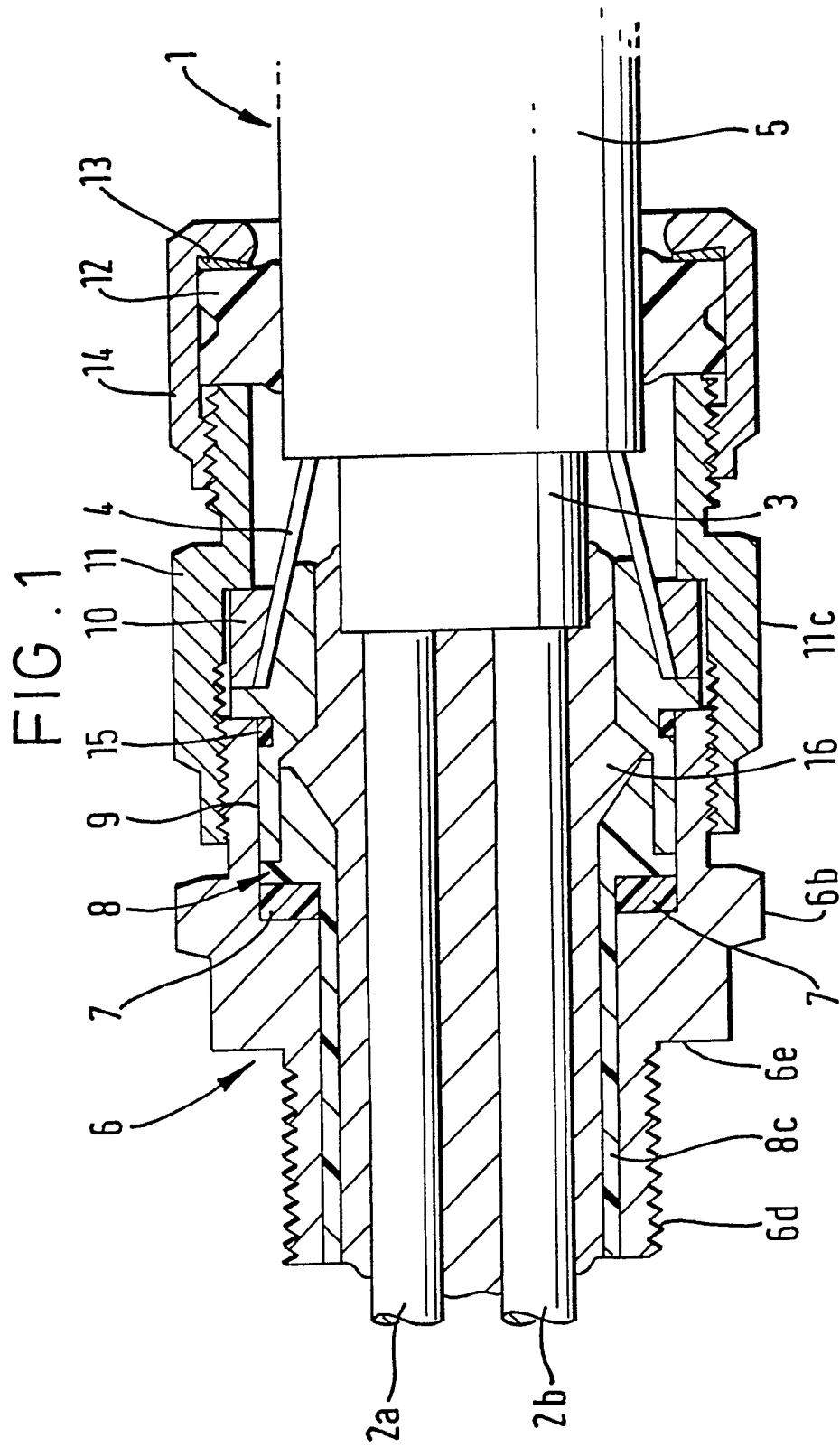


FIG. 2

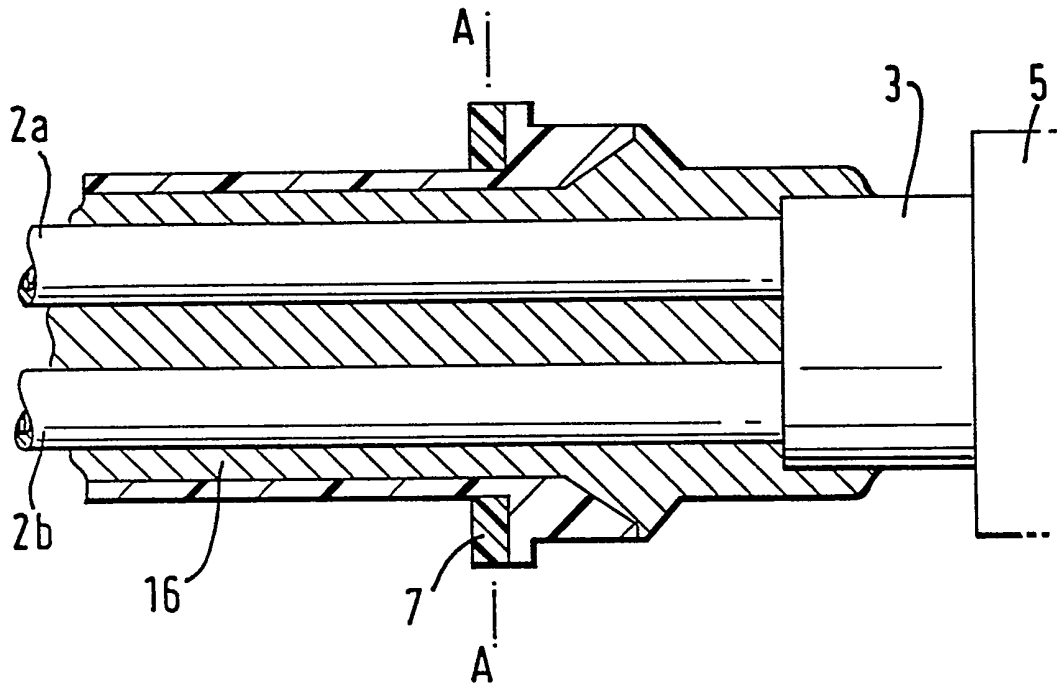


FIG. 3

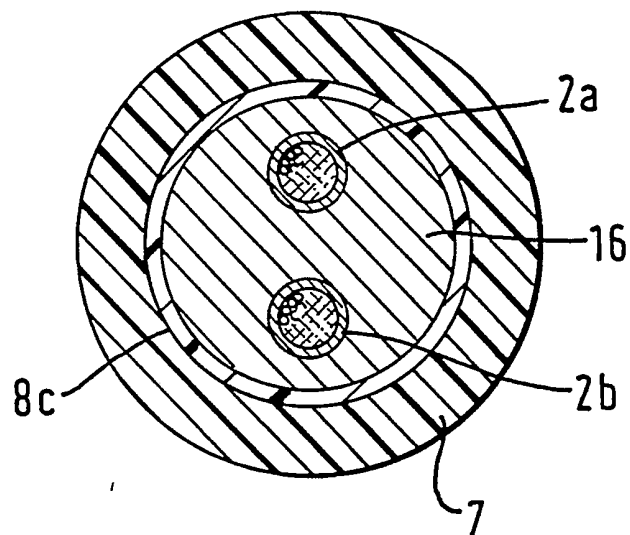


FIG. 4

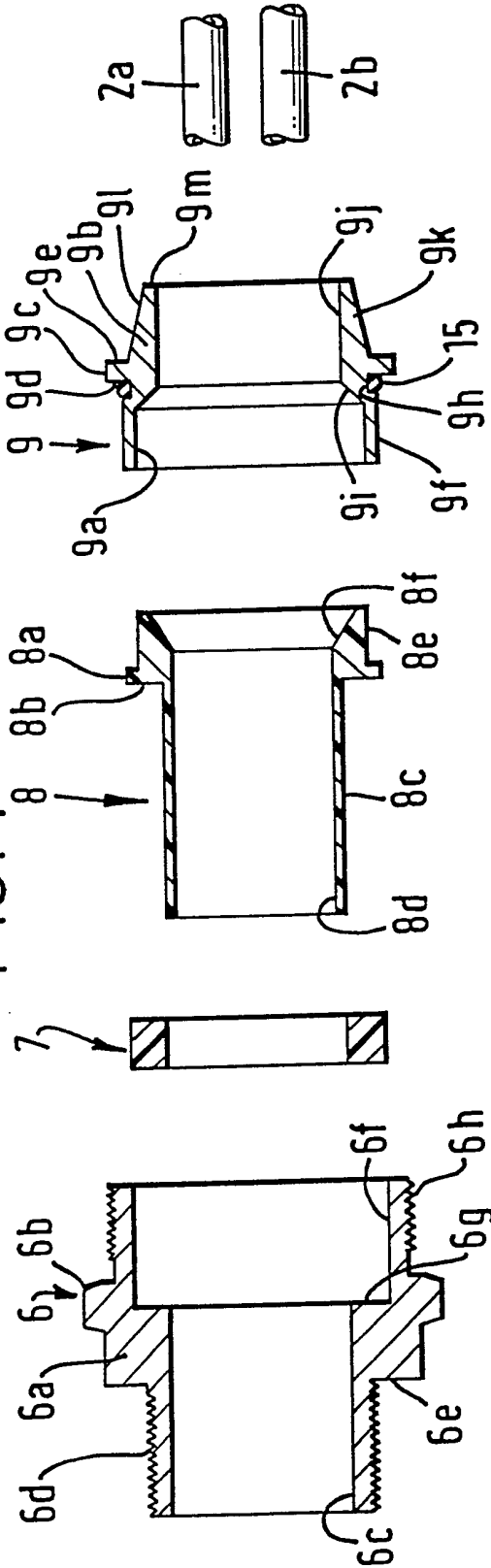
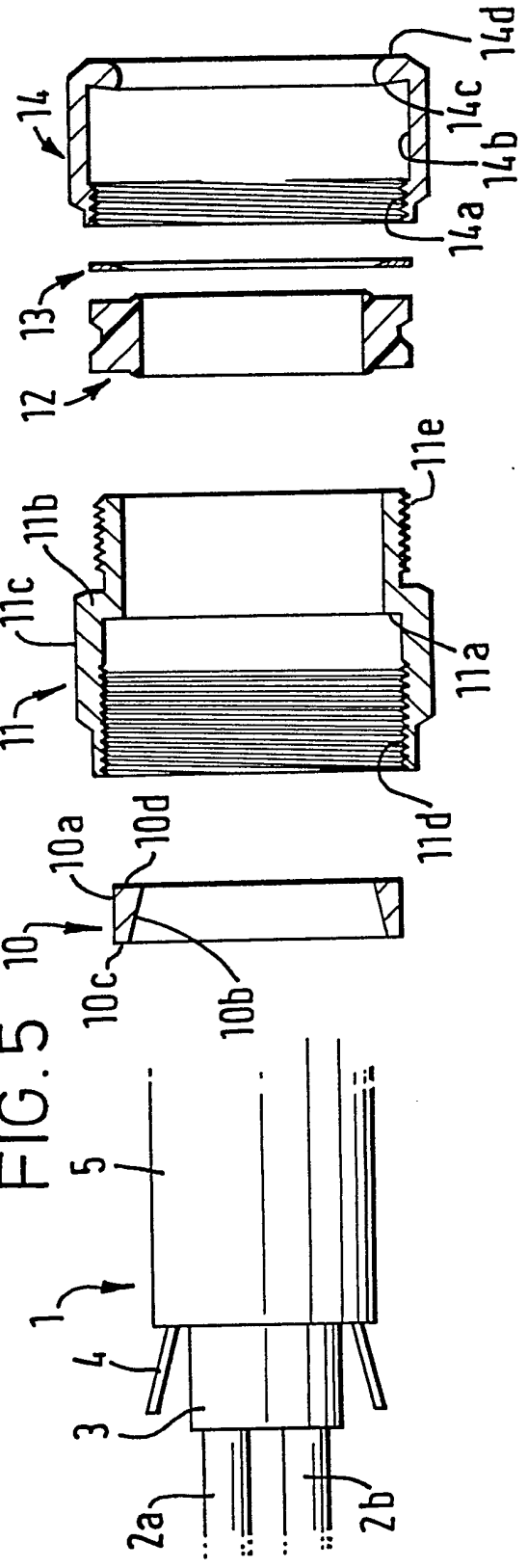


FIG. 5



01 Electric Cable Barrier Gland

This invention concerns an electric cable barrier gland.

05 This invention has particular application to cable barrier glands of the type that are fitted to an electric cable to provide a barrier to prevent ingress of liquid, gas or solids into the interstices of the cable between the cable cores when the cable sheathing has been removed to enable the connection of the conductive elements of the cable cores to some electrical equipment or installation. Barrier glands of this type are  
10 commonly used in hazardous locations and must meet specific flameproof performance criteria to prevent the risk of explosion.

It is already known to provide such a cable barrier gland in which a hardenable compound is used to fill the interstices between the cable cores and this compound is confined within a  
15 liner, sleeve or pot through which the cores extend. Such barrier glands with filler compounds and sleeves or pots are known, and two particular arrangements are described in our GB Patents Nos.2104306 and 2060281.

The manufacture of barrier glands requires accurate and  
20 close machining or production as there are prescribed limitations on any gap between unthreaded surfaces in a cable gland. Such gap is commonly referred to as the flame gap and requirements in cable glands are specified in British Standards No. 4683 and No. 5501 of 1971 (Parts 1 & 5) as well as in other Standards  
25 issued by regulatory or approval testing authorities.

In our GB Patent No. 2104306 we proposed to overcome certain problems relating to the tolerances required by using a deformable sleeve or lining into which the hardenable material is packed to provide the barrier seal around the cores. The  
30 arrangement is such that the deformable sleeve or lining is intended to expand radially on assembly and compression of the gland so that the sleeve or lining is forced into sealing engagement with the complementary unthreaded part of the gland to

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