

Title (en)
CONDUIT CARDIAC-VALVE PROSTHESIS AND A METHOD FOR THE PRODUCTION THEREOF

Title (de)
KONDUIT-HERZKLAPPENPROTHESE UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)
PROTHESE DE VENTRICULE CARDIAQUE A CONDUIT ET PROCEDE DE FABRICATION

Publication
EP 1324721 A2 20030709 (DE)

Application
EP 01986587 A 20011002

Priority
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• DE 10050099 A 20001009

Abstract (en)
[origin: DE10050099A1] A cylindrical or bulb-shaped tube(1) has an integral supporting housing(2) with a base ring(21). The ring has an arc shaped wall carrying two or more supports(22,23,24). The tube(1), supporting housing(2) and cusps(3,4,5) attached to the wall are made of one material, in particular polyurethane, but possibly another polymer and form a one-piece component. Independent claims are included for: (a) a process for manufacturing a tubular cardiac valve prosthesis in which a mold core complete with cusps(3,4,5) made by dipping in a polyurethane solution is located in an injection molding tool with the profile of the supporting housing(2), the latter is then molded onto the cusps and finally the tubular ends(1) are formed by spraying; and (b) an alternative manufacturing method in which drops of polymer solution are formed in lines or over the surface on cusp-shaped surfaces of a tool core, dried and the process repeated until a complete three-dimensional cusp film is realized. The free cusp edges are then separated and an opposing tool, which may have bulb-like bulges, is placed in position to allow the supporting housing to be formed either by dipping in polymer solution or by drop application. A metal ring(6) is then pushed on and enclosed in further polymer solution by dipping and drying. Final overspraying of both mold parts forms the tube ends.

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IPC 8 full level
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