

Title (en)
PRESS FIT CONNECTION BETWEEN PROSTHETIC COMPONENTS OF JOINT PROSTHESES

Title (de)
KLEMMSITZVERBINDUNG ZWISCHEN PROTHESENKOMPONENTEN VON GELENKPROTHESEN

Title (fr)
ASSEMBLAGE PAR BLOCAGE ENTRE DES COMPOSANTS DE PROTHESES D'ARTICULATION

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Application
EP 00901537 A 20000113

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Abstract (en)
[origin: DE19904437A1] Joint prostheses in which one joint partner is configured as a socket and the other joint partner is configured as a ball head, said ball head being rotatably mounted in the socket, are used, in particular, as shoulder joint and hip joint prostheses. The press fit connection, in particular, conical pressing, is also used as a technique for connecting metallic or ceramic ball heads to the cone. To this end, the ball head provided with a conical boring is placed on the cone. After placing the ball head on the cone, the ball head is subjected to an impact in order to fix the two components. To obtain a conical pressing, the joining surfaces of the boring in the ball head and of the cone must be machined with extreme precision, otherwise the durability of the conical pressing is jeopardized by a non-uniform introduction of force into the ball head or into the pivot. If the ball head is made of ceramic, fissuring can result due to stress peaks in the material, and in the worst case scenario, can lead to a destruction of the ball head. According to the invention, a coupling element (5) is thus provided which is inserted between the cone (5) and the ball head (3) of the press fit connection (1) and whose elasticity and damping properties can be predetermined by the porosity thereof and by the structure of its surface.

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