

Title (en)

PROSTHESIS FIXATION TO BONE.

Title (de)

BEFESTIGUNG EINER PROTESE AM KNOCHEN.

Title (fr)

FIXATION DE PROTHESE SUR L'OS.

Publication

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Application

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Abstract (en)

[origin: WO8302555A1] A two-part system for fastening an artificial joint component to bone with high early strength. The first part is a sleeve (34) defining an external geometric pattern of projections (128) which engage the bone (114) when implanted. The sleeve (34) performs none of the motion functions of the joint. In one embodiment the projections (128) are elongated and act in a self-broaching manner. In another embodiment the projections (128) are threads which have an outside diameter which may vary in one or more tapers, to best achieve anchorage in cancellous bone (114) in a prepared bony canal or cavity. The inner bore (36) of the sleeve (34) is a cone of a mechanically self-locking taper. The second part (40), which performs at least part of the motion function of the joint, has a mating external taper (42) which is driven into the taper within the sleeve (34) to be locked therein. The second part (40) may of itself extend through the sleeve (34) and into the prepared bony canal for addition stabilization and fastening. There is also provided a two-part system for fastening a dental prosthesis (210) to the jawbone (212) having as a first part (216), an externally threaded thin wall sleeve (216) which resides entirely within the jawbone (212). The threads (218) or other surface features are confined to the area near the point where the prosthesis (210) enters the jawbone (212). The sleeve (216) has integrally, or accommodates, a non-threaded stem (230) which extends relatively deeply into the jawbone (212). The inner bore (222) of the sleeve (216) is a cone of a mechanically self-locking taper. The present invention is applicable to a prosthetic device for any body joint.

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- EP 0000549 A1 19790207 - BAYER AG [DE]
- US 2719522 A 19551004 - HUDACK STEPHEN S
- DE 2839093 A1 19800320 - REIMER HANS DR

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