

Title (en)

SEEKER HEAD COMPRISING A PITCHING/YAWING INTERNAL CARDANIC SYSTEM

Title (de)

SUCHKOPF MIT NICK-GIER-INNENKARDANSYSTEM

Title (fr)

AUTODIRECTEUR DOTE D'UN SYSTEME DE CARDANS INTERNE DE TANGAGE ET DE LACET

Publication

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Application

**EP 04722158 A 20040320**

Priority

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Abstract (en)

[origin: WO2004088237A1] The invention relates to a seeker head (14, 15) comprising a rolling axis (18) and a pitching/yawing internal cardanic system containing an inner gimbal (22), which is mounted on a bearing structure (20) to pivot about a first cardanic axis (24) and an external gimbal (26) that supports a seeking system (30) of the seeker head and is mounted on the internal gimbal (22) to pivot about a second cardanic axis (28) running perpendicular to the first. The aim of the invention is to provide a cardanic system for a seeker head (14, 15), in which the tracking function of the platform and the seeking system does not exhibit eccentric behaviour and which permits a large squint angle and the sensing of targets over a large field of vision. To achieve this, the first cardanic axis (24) together with the rolling axis (18) form an acute angle (  $\alpha$  ) and the bearing structure (20) is mounted to rotate about the rolling axis (18). The dihedral angle, by which the optical axis (64) of the seeker system (30) can be deflected by pivoting displacements about the first and second cardanic axes (24, 28), contains the rolling axis (18).

IPC 8 full level

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