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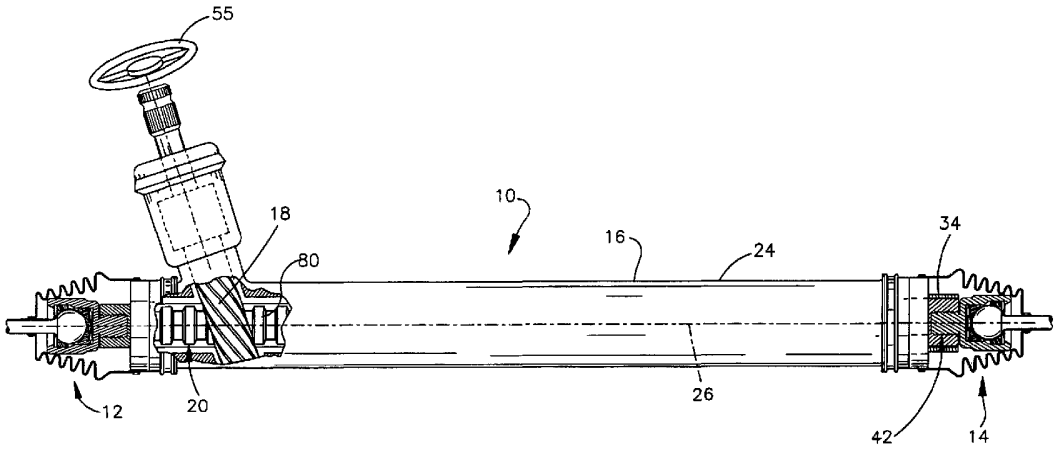
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(54) Title: RACK GEAR AND METHOD OF MAKING SAME



(57) Abstract: A rack (20) for a rack and pinion steering system (10) includes a fully dense powder metal rack tooth section (50) joined, by sintering, to a hollow rack tube (30). The rack tooth section (50) is formed by pressing powder metal (70) into a die assembly (60) having internal rack tooth forms (68). The rack tube (30) and the pressed powder metal (70) are sintered to complete formation of the rack (20).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/24900

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : F16H 1/08
US CL : 74/422

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 74/109, 422; 75/313

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,746,285 A (YONEZAWA) 5 May 1998 (05.05.1998), cols. 2-3	1, 3-4
A	US 6,178,843 B1 (MACHIDA ET AL.) 30 January 2001 (30.01.2001)	1-4
A	US 4,133,221 A (CLARY) 9 January 1979 (09.01.1979)	1-4
A	US 3,792,624 A (PITNER) 19 February 1974 (19.02.1974)	1-4
A	US 4,428,450 A (STENSTROM ET AL.) 31 January 1984 (31.01.1984)	1-4

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Date of the actual completion of the international search	Date of mailing of the international search report
30 October 2002 (30.10.2002)	29 MAY 2003
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer David Bucci Telephone No. 703-308-3668

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