Title (en)

PROCESS FOR DETECTING THE CLOSING POINT OF A TRANSVERSE PROCESS FOR DETECTING THE CLOSING POINT OF A TRANSVERSE BORE BY A PISTON IN A PUMP CYLINDER BORE BY A PISTON IN A PUMP CYLINDER

Publication

EP 0177715 A3 19890104 (DE)

Application

EP 85110244 A 19850816

Priority

DE 3434867 A 19840922

Abstract (en)

[origin: US4665742A] A method for determining the closing point of a pump piston relative to a transverse bore in a corresponding pump cylinder, the method including the steps of providing compressed air to the cylinder via the transverse bore, axially sliding the pump piston near the closing point, consecutively measuring two flow values through a throttle cross-section defined by the pump piston and transverse bore, measuring the positions of the piston corresponding to the two flow values and extrapolating the pump piston unto the closing point from the flow values and piston positions.

IPC 1-7

F02M 65/00; F04B 7/04; F04B 51/00

IPC 8 full level

F02M 65/00 (2006.01); **F04B 7/04** (2006.01); **F04B 51/00** (2006.01)

CPC (source: EP US)

F02M 65/002 (2013.01 - EP US); **F04B 51/00** (2013.01 - EP US); F04B 2201/0201 (2013.01 - EP US); F04B 2201/0804 (2013.01 - EP US); F04B 2203/0209 (2013.01 - EP US); F04B 2203/0211 (2013.01 - EP US); F04B 2205/01 (2013.01 - EP US); F04B 2205/08 (2013.01 - EP US); F04B 2205/09 (2013.01 - EP US); F04B 2205/13 (2013.01 - EP US)

Citation (search report)
- FR 2523217 A1 19830916 - FRANCE ETAT [FR]
- DE 3047078 A1 19820715 - BOSCH GMBH ROBERT [DE]
- DE 827142 C 19520107 - BOSCH GMBH ROBERT
- DE 762582 C 19540215 - BOSCH GMBH ROBERT
- DE 874531 C 19530423 - BOSCH GMBH ROBERT
- US 2979945 A 19610418 - TIBBETTS WILLIS F

Designated contracting state (EPC)

AT CH DE FR GB LI

DOCDB simple family (publication)

EP 0177715 A2 19860416; **EP 0177715 A3 19890104**; BR 8504602 A 19860715; DE 3434867 A1 19860403; DE 3434867 C2 19911205; JP S6179871 A 19860423; US 4665742 A 19870519

DOCDB simple family (application)

EP 85110244 A 19850816; BR 8504602 A 19850920; DE 3434867 A 19840922; JP 20670685 A 19850920; US 76335885 A 19850807