

Title (en)
HYDRAULIC CAM INJECTION SYSTEM

Title (de)
HYDRAULISCHES NOCKENEINSPRITZSYSTEM

Title (fr)
SYSTEME D'INJECTION HYDRAULIQUE A CAME

Publication
EP 3999734 A1 20220525 (FR)

Application
EP 20754324 A 20200716

Priority
• FR 1908158 A 20190718
• FR 1910882 A 20191001
• FR 1913538 A 20191129
• FR 2020051283 W 20200716

Abstract (en)
[origin: CA3144505A1] The hydraulic cam injection system (100) comprises an injection valve (50) housed in a tubular injection nozzle (54), a gap being left between a valve stem (51) of the valve (50) and the inner surface of the tubular injection nozzle (54) to allow an injectable fluid (58) to flow from pressurising means (10) while a receiving piston (62) rigidly connected to the valve (50) receives, on the one hand, the pressure of the injectable fluid (58) to keep the valve (50) closed, and on the other hand, the pressure of a hydraulic fluid (60) to open the valve (50), an injection cam (67) being capable of moving the receiving piston (62) by means of a transmitting piston (69) and the hydraulic fluid (60).

IPC 8 full level
F02B 19/02 (2006.01); **F02B 19/10** (2006.01); **F02B 19/12** (2006.01); **F02M 47/04** (2006.01); **F02M 57/02** (2006.01); **F02M 57/06** (2006.01); **F02M 61/08** (2006.01); **F02M 61/12** (2006.01); **F02M 69/04** (2006.01); **F02P 15/00** (2006.01)

CPC (source: CN EP KR)
F02B 19/02 (2013.01 - CN EP KR); **F02B 19/1085** (2013.01 - CN KR); **F02B 19/109** (2013.01 - CN EP KR); **F02B 19/12** (2013.01 - CN KR); **F02M 47/046** (2013.01 - CN EP KR); **F02M 57/023** (2013.01 - CN EP KR); **F02M 57/06** (2013.01 - CN KR); **F02M 61/08** (2013.01 - CN EP KR); **F02M 61/12** (2013.01 - CN KR); **F02M 69/042** (2013.01 - CN KR); **F02P 13/00** (2013.01 - CN KR); **F02B 19/1085** (2013.01 - EP); **F02B 19/12** (2013.01 - EP); **F02M 57/06** (2013.01 - EP); **F02M 61/12** (2013.01 - EP); **F02M 69/042** (2013.01 - EP); **F02M 2547/006** (2013.01 - CN EP KR); **F02M 2700/1376** (2013.01 - EP KR); **F02P 13/00** (2013.01 - EP); **Y02T 10/12** (2013.01 - EP KR)

Citation (search report)
See references of WO 2021009466A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
FR 3098857 A1 20210122; **FR 3098857 B1 20221014**; AU 2020315180 A1 20220120; CA 3144505 A1 20210121; CN 114051554 A 20220215; EP 3999734 A1 20220525; FR 3098858 A1 20210122; FR 3098858 B1 20211029; FR 3098868 A1 20210122; FR 3098868 B1 20221014; JP 2022541109 A 20220922; KR 20220034796 A 20220318; WO 2021009466 A1 20210121

DOCDB simple family (application)
FR 1910882 A 20191001; AU 2020315180 A 20200716; CA 3144505 A 20200716; CN 202080045699 A 20200716; EP 20754324 A 20200716; FR 1908158 A 20190718; FR 1913538 A 20191129; FR 2020051283 W 20200716; JP 2021576143 A 20200716; KR 20227002233 A 20200716