

Title (en)  
Double pump

Title (de)  
Doppelpumpe

Title (fr)  
Pompe double

Publication  
**EP 2161455 B1 20180530 (DE)**

Application  
**EP 08015575 A 20080904**

Priority  
EP 08015575 A 20080904

Abstract (en)  
[origin: EP2161455A1] The dual pump (5) has pipes (20, 25) ending in a common outlet pipe (30). The pipes are provided at a high pressure side of two pumps (10, 15) of the dual pump. A check valve (35) is arranged in an opening region (27) in a flow controlled manner. One of the pipes blocks the other pipe during the flow. The check valve has two flow surfaces (80, 85) projecting in a flow path in a closing position. The flow surfaces are turned in an upstream manner. The flow surfaces are formed by a spoiler that is arranged at the check valve, and encircled by two sealing surfaces (65, 70).

IPC 8 full level  
**F04D 15/00** (2006.01); **F04D 13/14** (2006.01)

CPC (source: EP)  
**F04D 13/14** (2013.01); **F04D 15/0016** (2013.01)

Citation (examination)  
FR 1142593 A 19570919 - GUINARD POMPES

Cited by  
EP3179110A1; DE102014006258A1; EP4102078A2; EP2469094A2; DE102010055841A1; EP4102076A1

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

DOCDB simple family (publication)  
**EP 2161455 A1 20100310; EP 2161455 B1 20180530**

DOCDB simple family (application)  
**EP 08015575 A 20080904**