

Title (en)
Double pump

Title (de)
Doppelpumpe

Title (fr)
Pompe double

Publication
EP 2161455 A1 20100310 (DE)

Application
EP 08015575 A 20080904

Priority
EP 08015575 A 20080904

Abstract (en)
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).

Abstract (de)
Die Doppelpumpe (5) weist zwei Pumpen (10, 15), deren druckseitige Leitungen (20, 25) in einer gemeinsamen Ausgangsleitung (30) münden, und eine im Mündungsbereich (27) angeordnete strömungsgesteuerte Rückschlagklappe (35) auf, die bei Durchströmung einer druckseitigen Leitung (20) die andere druckseitige Leitung (25) verschließt. Die Rückschlagklappe (35) weist dabei mindestens eine in Schließstellung in den Strömungspfad (75) ragende Anströmfläche (80, 85) auf, welche stromaufwärts gewandt ist. (Fig. 1)

IPC 8 full level
F04D 15/00 (2006.01)

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

Citation (applicant)
US 2017033 A 19351008 - MCGUFFIN CHARLIE L

Citation (search report)
• [X] US 2017033 A 19351008 - MCGUFFIN CHARLIE L
• [X] DE 1528649 A1 19690529 - FLYGTS PUMPAR AB
• [A] DE 4330507 C1 19941006 - GRUNDFOS AS [DK]

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

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

Designated extension state (EPC)
AL BA MK RS

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

DOCDB simple family (application)
EP 08015575 A 20080904