

Title (en)
SELF-PRIMING LATERAL CHANNEL PUMP

Publication
EP 0118027 B1 19861126 (DE)

Application
EP 84101022 A 19840201

Priority
DE 3303460 A 19830202

Abstract (en)
[origin: EP0118027A2] 1. Self-priming lateral channel pump having a housing with an inlet opening (12), outlet opening (13) and incorporated lateral channels, having at least one impeller (32) with impeller cells which are arranged in at least two coaxial rings of cells or different diameters so that a flow medium reaches first the inner and then the outer impeller cells, while the lateral channel/channels directly connected to the outlet opening extend(s) completely over the impeller cells associated therewith and this/these lateral channel/channels (17, 17') is/are provided only over part of the circumference, whilst the inlet opening(s) of the lateral channel/channels associated with the inner impeller ring/rings is/are arranged in the near-axis portion and this/these lateral channel/channels (17, 17') is/are continued after (a) transitional opening(s) (19, 19') via (a) terminal secondary displacement channel/channels (20, 21'), characterized in that the lateral channel/channels (17, 17') connected to the inlet opening (12) of the housing extend(s) partially over the associated impeller cells (33, 33') in such a way that the portions of the impeller cells (33, 33') which are not overlapped, namely the near-axis portions, are sealed off by the the housing (16, 16'), whilst the transitional opening(s) (19, 19') of the lateral channel/channels (17, 17') associated with the inner ring/rings of impeller cells (33, 33') is/are arranged in the near-axis portion.

IPC 1-7
F04D 5/00

IPC 8 full level
F04D 5/00 (2006.01)

CPC (source: EP)
F04D 5/002 (2013.01); **F04D 5/005** (2013.01)

Cited by
EP0397041A3; AU760732B2; DE102007026533A1; GB2401408A; US6425734B2; US6984099B2; WO0181767A1; DE102022001696A1; WO2023217407A1

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