

Title (en)

Self-priming lateral channel pump.

Title (de)

Selbstansaugende Seitenkanalpumpe.

Title (fr)

Pompe auto-amorçante à canal périphérique.

Publication

EP 0118027 A2 19840912 (DE)

Application

EP 84101022 A 19840201

Priority

DE 3303460 A 19830202

Abstract (en)

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.

Abstract (de)

Selbstansaugende Seitenkanalpumpe, bestehend aus einem Gehäuse und darin gelagertem Laufrad, wobei das Laufrad einen inneren und einen äußeren Kranz von Schaufelzellen aufweist, wobei der innere Kranz von Schaufelzellen von einem mit der Einlaßöffnung der Pumpe verbundenen Seitenkanal lediglich teilweise überdeckt wird, der äußere Kranz von Schaufelzellen von einem Seitenkanal ganz überdeckt wird und dieser Seitenkanal unmittelbar zur Auslaßöffnung der pumpe geführt ist.

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F04D 5/00

IPC 8 full level

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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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