

Title (en)  
PUMP IMPELLER

Title (de)  
PUMPENLAUFRAD

Title (fr)  
ROTOR DE POMPE

Publication  
**EP 3571411 B1 20230510 (DE)**

Application  
**EP 18730640 A 20180525**

Priority  
• DE 102017005283 A 20170602  
• EP 2018000273 W 20180525

Abstract (en)  
[origin: WO2018219496A1] The invention relates to an asymmetric pump impeller (1) for a pump unit for conveying a liquid which in particular contains solids, said impeller being formed at least to some extent in layers by an additive production method and having at least one cavity (5, 6) in the interior of the material of the impeller, said cavity being formed during the production in layers and closed completely towards the outside or except for an opening (7, 8) for removal of unhardened material from the cavity (5, 6). The cavity (5, 6) is positioned and designed in such a way that an inertia axis of the pump impeller (1) is displaced with respect to the axis of rotation (15) of the pump impeller (1). This has the advantage that the impeller is already largely free of unbalances immediately after the production or manufacture of the impeller, such that no or only minor subsequent balancing is required.

IPC 8 full level  
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CPC (source: EP)  
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Citation (examination)  
• US 9217331 B1 20151222 - YELLAPRAGADA SRIKAR [US], et al  
• WO 2016127225 A1 20160818 - ATLAS COPCO AIRPOWER NV [BE]

Cited by  
CN116921692A

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DOCDB simple family (publication)  
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