

Title (en)  
FILTER ELEMENT

Title (de)  
FILTERELEMENT

Title (fr)  
ÉLÉMENT FILTRANT

Publication  
**EP 2919880 A1 20150923 (DE)**

Application  
**EP 12812873 A 20121224**

Priority  
• DE 102012022283 A 20121114  
• DE 102012022285 A 20121114  
• EP 2012005375 W 20121224

Abstract (en)  
[origin: WO2014075702A1] A filter element (1), with a preferably multilayer structure of a filter medium (3) that has, in pleated form, filter pleats (5, 7) of different pleat heights (h1, h2), with filter pleats (7) with a first pleat height (h1) and with filter pleats (5) with an opposing, smaller second pleat height (h2), wherein the filter element has a throughflow direction for fluid to be cleaned away from a dirty side to a clean side (R), is characterised in that the transitions arranged adjacent to the clean side (R) or the dirty side (S) all conclude along a fictitious circular cylinder (9), which penetrates the filter medium (3) coaxially to its longitudinal axis (LA).

IPC 8 full level  
**B01D 29/21** (2006.01)

CPC (source: EP US)  
**B01D 29/21** (2013.01 - EP US); **B01D 29/333** (2013.01 - US); **B01D 29/56** (2013.01 - US); **B01D 2201/122** (2013.01 - EP US)

Citation (search report)  
See references of WO 2014075702A1

Citation (examination)  
• JP S50115876 U 19750920  
• US 2395449 A 19460226 - BRIGGS SOUTHWICK W  
• EP 1757355 A1 20070228 - ENTEGRIS INC [US]  
• GB 725066 A 19550302 - FRAM CORP  
• EP 1322396 A2 20030702 - CUNO INC [US]

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2014075702 A1 20140522**; CN 104661720 A 20150527; CN 104661720 B 20161109; CN 104780990 A 20150715; EP 2919879 A1 20150923; EP 2919879 B1 20200226; EP 2919880 A1 20150923; EP 4094819 A1 20221130; JP 2016501119 A 20160118; JP 2016501120 A 20160118; JP 6258956 B2 20180110; JP 6510417 B2 20190508; US 10213709 B2 20190226; US 10478759 B2 20191119; US 11033838 B2 20210615; US 2015165352 A1 20150618; US 2015290562 A1 20151015; US 2019143250 A1 20190516; WO 2014075703 A1 20140522

DOCDB simple family (application)  
**EP 2012005375 W 20121224**; CN 201280075997 A 20121224; CN 201280077060 A 20121224; EP 12812534 A 20121224; EP 12812873 A 20121224; EP 2012005376 W 20121224; EP 22180195 A 20121224; JP 2015542167 A 20121224; JP 2015542168 A 20121224; US 201214418154 A 20121224; US 201214440665 A 20121224; US 201916245403 A 20190111