

Title (en)  
A FILTER CARTRIDGE AND METHOD

Title (de)  
FILTERKARTUSCHE UND VERFAHREN

Title (fr)  
CARTOUCHE DE FILTRE ET PROCEDE

Publication  
**EP 0876185 A1 19981111 (EN)**

Application  
**EP 96939751 A 19961128**

Priority  
• AU 9600762 W 19961128  
• AU PN681695 A 19951128  
• AU PN973196 A 19960507

Abstract (en)  
[origin: WO9719737A1] A recycling method and a tool utilised with that recycling method. A moulded carbon fibre reinforced plastics material so that the cartridge is sufficiently ridged so that it can be reused. The cartridge is injection moulded using a formulation of 60 % by weight nylon melt resin with chopped glass fibre to 40 % by weight. The resin has a melt temperature in excess of 200 DEG C. At (11) a filter element is prepared and this involves a 100 % cellulose element (12) into which a reusable moulded or otherwise formed reinforced carbon fibre centre core (13) is pushed. The filter element and core (13) are forced using a press either together or in turn into the cartridge (10). Now the cartridge (10) in the illustrated embodiment includes an annular flare at (14) which operates as a filter element lead-in guide and assists in feeding the filter element into the cartridge. The tool (20) includes a claw assembly (21) utilising a manually operable expander (22) so that upon insertion of the claw assembly (21) into the filter element (11) the expander (22) can be employed to move the jaws (23) of the claw assembly to the position illustrated at (24). A lever (25) is used to extract the claw assembly (21) and thereby the filter element (11) from the cartridge (10). It will be appreciated once the spent filter element has been removed from the cartridge, the cartridge can be reloaded and it can be returned and reused over and over again.

IPC 1-7  
**B01D 27/08; B01D 35/30**

IPC 8 full level  
**F02M 37/22** (2006.01); **B01D 27/08** (2006.01); **B01D 29/01** (2006.01); **B01D 35/02** (2006.01); **B01D 35/30** (2006.01)

CPC (source: EP KR)  
**B01D 27/08** (2013.01 - KR); **B01D 29/012** (2013.01 - EP); **B01D 29/072** (2013.01 - EP); **B01D 29/073** (2013.01 - EP); **B01D 29/54** (2013.01 - EP); **B01D 35/30** (2013.01 - KR)

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9719737 A1 19970605**; AR 004803 A1 19990310; BR 9611794 A 19990713; CA 2239084 A1 19970605; CN 1202837 A 19981223; EP 0876185 A1 19981111; EP 0876185 A4 19990224; JP 2000500396 A 20000118; KR 19990071704 A 19990927; MX 9804147 A 19981129; NZ 322831 A 20000228; TW 348066 B 19981221

DOCDB simple family (application)  
**AU 9600762 W 19961128**; AR P960105407 A 19961128; BR 9611794 A 19961128; CA 2239084 A 19961128; CN 96198536 A 19961128; EP 96939751 A 19961128; JP 52000897 A 19961128; KR 19980703981 A 19980528; MX 9804147 A 19980526; NZ 32283196 A 19961128; TW 85114649 A 19961127