



(11) **EP 1 582 252 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:
B01D 63/02 (2006.01) **B01D 53/22** (2006.01)
B01D 19/00 (2006.01) **B01F 3/04** (2006.01)

(48) Corrigendum issued on:
20.04.2016 Bulletin 2016/16

(45) Date of publication and mention
of the grant of the patent:
30.12.2015 Bulletin 2015/53

(21) Application number: **05006520.0**

(22) Date of filing: **24.03.2005**

(54) **Three-port high performance mini hollow fiber membrane contactor**

Hochwirksamer Kleinstoffaustauschapparat mit Hohlfasermembranen und drei Zu- und Ableitungen
Mini-contacteur à membrane en fibres creuses à trois ports et à haute performance

(84) Designated Contracting States:
DE FR GB IT

(30) Priority: **30.03.2004 US 812450**

(43) Date of publication of application:
05.10.2005 Bulletin 2005/40

(73) Proprietor: **3M Innovative Properties Company**
St. Paul, MN 55133-3427 (US)

(72) Inventors:
• **Sengupta, Amitava**
Charlotte
North Carolina 28270 (US)
• **Holstein, Linus I.**
Salisbury
North Carolina 28146 (US)

• **Bouldin, E. Wayne Jr.**
Fort Mill
South Carolina 29715 (US)

(74) Representative: **Schröder, Richard**
CPW GmbH
Kasinostrasse 19-21
42103 Wuppertal (DE)

(56) References cited:
EP-A- 1 374 974 **EP-A2- 1 160 002**
EP-A2- 1 270 063 **JP-H- 07 088 304**
US-A- 3 422 008 **US-A- 4 623 460**
US-A- 5 383 448 **US-A- 6 158 721**
US-A1- 2003 154 856 **US-B1- 6 207 053**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 1 582 252 B8