

Title (en)  
REVERSE OSMOSIS SYSTEM WITH CONTROLLED RECIRCULATION

Title (de)  
UMKEHROSMOSESYSTEM MIT GESTEUERTER RÜCKFÜHRUNG

Title (fr)  
SYSTEME PAR OSMOSE INVERSE A RECIRCULATION CONTROLEE

Publication  
**EP 1414552 A1 20040506 (EN)**

Application  
**EP 02707474 A 20020109**

Priority  
• US 0201023 W 20020109  
• US 26050201 P 20010109

Abstract (en)  
[origin: WO02055182A1] A water treatment system (10) where concentrate water from a reverse osmosis element (15) or other tangential type filter is circulated and mixed with fresh feed water in an amount that permeates a filter membrane (16). The concentration of contaminants in the circulating stream is continuously monitored and when a predetermined level is reached, the system (10) is purged of the contaminated water and a new cycle is started. This results in a water purification system (10) that will self adapt to various water conditions, at differing sites or at an installed site, to provide the most efficient use of the feed water and energy for the amount of contaminants present in the feed water at any given time.

IPC 1-7  
**B01D 61/00**

IPC 8 full level  
**B01D 61/02** (2006.01); **B01D 61/04** (2006.01); **B01D 61/08** (2006.01); **B01D 61/12** (2006.01); **B01D 61/14** (2006.01); **B01D 61/22** (2006.01); **B01D 65/02** (2006.01); **C02F 1/44** (2006.01)

CPC (source: EP US)  
**B01D 61/025** (2013.01 - EP); **B01D 61/04** (2013.01 - EP); **B01D 61/081** (2022.08 - EP US); **B01D 61/12** (2013.01 - EP); **B01D 61/14** (2013.01 - EP); **B01D 61/22** (2013.01 - EP); **B01D 65/02** (2013.01 - EP); **C02F 1/441** (2013.01 - EP); **B01D 2311/04** (2013.01 - EP); **B01D 2311/2523** (2022.08 - EP US); **B01D 2321/10** (2013.01 - EP)

C-Set (source: EP)  
**B01D 2311/04 + B01D 2311/12 + B01D 2311/25**

Cited by  
CN107250063A

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

DOCDB simple family (publication)  
**WO 02055182 A1 20020718; WO 02055182 A9 20040401**; EP 1414552 A1 20040506

DOCDB simple family (application)  
**US 0201023 W 20020109**; EP 02707474 A 20020109