

Title (en)

METHOD AND DEVICE FOR INJECTING TWO-PHASE CO₂ IN A TRANSFER GASEOUS MEDIUM

Title (de)

VERFAHREN UND VORRICHTUNG ZUM EINSPRITZEN VON CO₂ IN EINEM GASFÖRMIGEN TRANSFERMEDIUM

Title (fr)

PROCEDE ET DISPOSITIF D'INJECTION DE CO₂ DIPHASIQUE DANS UN MILIEU GAZEUX EN TRANSFERT

Publication

EP 1534414 A2 20050601 (FR)

Application

EP 03763931 A 20030707

Priority

- FR 0302097 W 20030707
- FR 0208734 A 20020711

Abstract (en)

[origin: US2005268786A1] A method and an apparatus for injecting two-phase (gas+solid) carbon dioxide into a gas stream. Liquid carbon dioxide is cryogenically expanded into two-phase carbon dioxide, which is then injected into the center of the stream. An inerting gas is also injected into the stream along with the two-phase carbon dioxide.

IPC 1-7

B01F 3/02; **B01F 3/06**

IPC 8 full level

B01J 4/00 (2006.01); **B01F 23/00** (2022.01); **B01F 23/10** (2022.01); **B01F 23/30** (2022.01)

CPC (source: EP US)

B01F 23/09 (2022.01 - EP US); **B01F 23/12** (2022.01 - EP US); **B01F 23/30** (2022.01 - EP US); **B01F 25/313** (2022.01 - EP US); **B01F 33/834** (2022.01 - EP); **B01F 33/834** (2022.01 - US); **B01F 2025/911** (2022.01 - EP US); **B01F 2025/918** (2022.01 - EP US); **Y10T 137/0329** (2015.04 - EP US); **Y10T 137/87652** (2015.04 - EP US)

Citation (search report)

See references of WO 2004007061A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2005268786 A1 20051208; **US 7648569 B2 20100119**; AT E441472 T1 20090915; AU 2003263267 A1 20040202; BR 0312329 A 20050412; BR 0312329 B1 20110823; CA 2490662 A1 20040122; CA 2490662 C 20120124; DE 60329111 D1 20091015; EP 1534414 A2 20050601; EP 1534414 B1 20090902; FR 2842123 A1 20040116; FR 2842123 B1 20040827; JP 2005532161 A 20051027; WO 2004007061 A2 20040122; WO 2004007061 A3 20040408

DOCDB simple family (application)

US 52101105 A 20050711; AT 03763931 T 20030707; AU 2003263267 A 20030707; BR 0312329 A 20030707; CA 2490662 A 20030707; DE 60329111 T 20030707; EP 03763931 A 20030707; FR 0208734 A 20020711; FR 0302097 W 20030707; JP 2004520728 A 20030707