

Title (en)  
Fluid mixing apparatus

Title (de)  
Flüssigkeitsmischvorrichtung

Title (fr)  
Appareil de mélange de fluides

Publication  
**EP 1886724 A1 20080213 (EN)**

Application  
**EP 07019312 A 20031024**

Priority  
• EP 03811311 A 20031024  
• US 29456302 A 20021115

Abstract (en)  
A mixer apparatus for use with a vessel centered about a longitudinal axis is disclosed. The mixer has a blade body is formed along a central axis. The blade body has a first end, a second end spaced from the first end along the head axis, and passageway extending between the first and second ends. The passageway tapers from the first end to the second end. The outer surface of the blade body defines an inside blade diameter "ID" at the second end and an outside diameter "OD" at the first end. The Blade body is positioned within and coaxial to the vessel. A scotch yoke, operatively connected to the blade body by a shaft, effects reciprocating longitudinal movement of the blade body thought a stroke "S", with a duration "T" for each stroke. Enhanced mixing efficiencies are achieved when the mixer is operated within a set of operational parameters defined by the equation:  $80 \# 0.36 \times OD^2 / ID^2 \times S/T \# 550$ , when OD, ID and S are expressed in inches, and T is expressed in minutes.

IPC 8 full level  
**B01F 11/00** (2006.01); **B01F 15/00** (2006.01); **B03D 1/16** (2006.01)

CPC (source: EP US)  
**B01F 31/441** (2022.01 - EP); **B01F 31/449** (2022.01 - EP); **B01F 35/325** (2022.01 - EP); **B01F 35/55** (2022.01 - EP US); **B03D 1/028** (2013.01 - EP); **B03D 1/1462** (2013.01 - EP); **B03D 1/16** (2013.01 - EP); **B01F 2215/0409** (2013.01 - EP)

Citation (search report)  
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CN109454758A

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)  
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DOCDB simple family (application)  
**CA 0301629 W 20031024**; AT 03811311 T 20031024; AT 07019313 T 20031024; AU 2003275848 A 20031024; CA 2549983 A 20031024; CA 2596287 A 20031024; CA 2596395 A 20031024; DE 60320674 T 20031024; DE 60328548 T 20031024; DE 60329043 T 20031024; DK 03811311 T 20031024; EP 03811311 A 20031024; EP 07019312 A 20031024; EP 07019313 A 20031024; ES 03811311 T 20031024; PT 03811311 T 20031024