

Title (en)
MIXING AND KNEADING DEVICE

Publication
EP 0220575 B1 19921230 (DE)

Application
EP 86114051 A 19861010

Priority
DE 3538070 A 19851025

Abstract (en)
[origin: US4775243A] A mixing and kneading apparatus with a kneading shaft bearingly supported in a cylindrical housing, a plurality of disk elements mounted perpendicularly and axially spaced apart on the kneading shaft. The disk elements carry scraper edges arranged essentially transversely to the plane of the disk elements and facing the housing wall at a slight distance. The housing wall, the kneading shaft, and the disk elements are optionally heatable or and coolable. In order to obtain an intensive intermixing and a uniform retention time of all of the product particle present in the toroidal reaction space, at least one mixer arm connected to the housing or the kneading shaft projects into the toroidal space to a distance at least in the vicinity of the axial and radial center of the toroidal cross section between two axially adjacent disk elements. The mixing arm applies a mixing and/or transport action onto the goods or products present between the inner wall of the housing and the kneading shaft.

IPC 1-7
B01F 7/04

IPC 8 full level
B01F 27/73 (2022.01)

CPC (source: EP US)
B01F 27/707 (2022.01 - EP US)

Citation (opposition)
Opponent : List AG
• DE 2349106 A1 19740502 - LIST HEINZ [CH]
• AT 334328 B 19760110 - LIST HEINZ [CH]
• CH 661450 A5 19870731 - LIST IND VERFAHRENSTECH
• PROSPEKT DISCOTHERM, 30 June 1975 (1975-06-30), XP55287957
• PROSPEKT DISCOTHERM B, 30 June 1975 (1975-06-30), XP055287173
• UNTERLAGEN ASSORENI

Cited by
EP0329091A1; EP0304925A1; EP0320586A1; EP0761295A1; US5934801A; WO9622156A1; WO8803053A1

Designated contracting state (EPC)
AT BE CH FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0220575 A2 19870506; EP 0220575 A3 19890329; EP 0220575 B1 19921230; AT E83946 T1 19930115; DE 3538070 A1 19870430; DE 3538070 C2 19910307; JP H0649142 B2 19940629; JP S62102823 A 19870513; US 4775243 A 19881004

DOCDB simple family (application)
EP 86114051 A 19861010; AT 86114051 T 19861010; DE 3538070 A 19851025; JP 25094686 A 19861023; US 92359186 A 19861027