

Title (en)
TRANSMISSION ASSEMBLY

Title (de)
GETRIEBEEINHEIT

Title (fr)
ENSEMBLE DE TRANSMISSION

Publication
EP 0935718 A4 20010314 (EN)

Application
EP 97947354 A 19971106

Priority

- US 9720101 W 19971106
- US 73973996 A 19961107
- US 73974096 A 19961107
- US 73973896 A 19961107

Abstract (en)
[origin: WO9822301A2] The transmission assembly incorporates a mixer gearbox assembly, a system for centering and retaining a mixer shaft and drive and a seal. The mixer gearbox assembly is operable to drive a mixer shaft capable of receiving either a complete electric drive motor on a first face of the gearbox housing for operatively coupling with a first end of a long cross-shaft in the housing, or alternatively a partial electric drive motor on a second face of the gearbox housing (4) operating coupling with an opposite end of the cross-shaft. The system for automatically centering and rigidly retaining a mixer shaft in a mixer drive includes a hollow quill in a mixer drive which is provided with an axial bore having a first diameter along a central portion thereof and tapering linearly and axially in opposite directions away from the central portion with increasing diameter to define a pair of opposed conical portions of the axial bore on either side of the central bore. A smooth-surface cylindrical mixer shaft is inserted into the bore and is retained by the tightening of upper and lower tapered cylindrical locks which are slidable along the mixer shaft and which have conical outer surfaces which are matable with the upper and lower conical portions of the quill bore. The labyrinth shaft seal prevents the migration of fluids through a rotary joint, especially the migration of gear lubricant from a mixer drive assembly into a batch of process materials being mixed.

IPC 1-7
F16H 57/02; **B25G 3/20**; **E21B 33/00**; **B01F 15/00**; **F16H 1/20**

IPC 8 full level
B01F 15/00 (2006.01); **B25G 3/20** (2006.01); **E21B 33/00** (2006.01); **F16H 1/20** (2006.01); **F16H 57/02** (2006.01)

IPC 8 main group level
B60K (2006.01)

CPC (source: EP)
F16H 1/203 (2013.01)

Citation (search report)

- [A] US 4810174 A 19890307 - STUCKEY BUDDY S [US], et al
- [A] EP 0079455 A1 19830525 - THYSSEN INDUSTRIE [DE]
- [A] US 3434366 A 19690325 - RASO VITO, et al
- See references of WO 9822301A2

Designated contracting state (EPC)
BE DE FI FR GB IT NL SE

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