

Title (en)

Swivel assembly for a pneumatic underground piercing tool.

Title (de)

Drehverbindung für eine unterirdische pneumatische Bohrvorrichtung.

Title (fr)

Joint à pivot pour un outil de forage pneumatique souterrain.

Publication

**EP 0462821 A2 19911227 (EN)**

Application

**EP 91305550 A 19910619**

Priority

US 54105490 A 19900620

Abstract (en)

A swivel assembly for supporting a valve sleeve in a cavity of a striker in a pneumatic underground piercing tool. A valve supporting means supports the valve sleeve on a valve body by cooperating spherical seat and bearing members to allow angular movement between the valve sleeve and valve body. A retaining mechanism is provided for resiliently securing the valve supporting means to the valve body. <IMAGE>

IPC 1-7

**E21B 4/14**; **E21B 7/26**

IPC 8 full level

**E21B 4/14** (2006.01)

CPC (source: EP)

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**EP 0462821 A2 19911227**; **EP 0462821 A3 19930127**

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