Title (en)

POSITIVE KEEPER MEANS FOR PINS OF EARTHWORKING TIPS

Publication

EP 0343191 B1 19930804 (EN)

Application

EP 88902349 A 19871130

Priority

- US 451587 A 19870120
- US 451687 A 19870120

Abstract (en)

[origin: WO8805483A1] Pin retainer assembly having a keeper means for retaining earthworking tips on adapters. Positive retention of earthworking tips on their adapters by their retaining pins during its work cycle is extremely important from an operational as well as a cost standpoint. The loss of the tips materially affect productions in addition to the time consuming expense of replacement of repair of the components. Not only must the tips be adequately retained, they must be capable of quick removal for replacement purposes. Keeper means (44) for the pin (17) is captured in a recess (28) between a nose (16) of the adapter (12) and a sidewall (36) of the tips (14) and includes a washer (46) slidably disposed on the pin (17) and a resilient retaining ring (68, 78) having a predetermined radial thickness disposed in locking engagement in a groove (21) on the pin (17) and a groove (50) of the washer (46). One of the grooves (21, 50) in the pin (17) and the washer has a depth equal to or greater than the predetermined radial thickness of the retaining ring (68, 78) and the other one of the grooves (21, 50) has a depth sufficient to prevent camming of the ring (68, 78) out of the groove (21, 50) and to provide substantially the maximum cross-section width of the ring (68, 78) in shear. In order to disassemble the pin (18), the ring (68, 78) must be sheared or the washer (46) fractured.

IPC 1-7

E02F 3/40; E02F 9/28

IPC 8 full level

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