

Title (en)

LOCKING APPARATUS FOR BLIND FASTENERS.

Title (de)

VERRIEGELUNGSGERÄT FÜR BLINDBEFESTIGER.

Title (fr)

APPAREIL DE BLOCAGE POUR ELEMENTS DE FIXATION BORGNES.

Publication

EP 0192758 A4 19900514 (EN)

Application

EP 85904704 A 19850904

Priority

- US 64676684 A 19840904
- US 76603985 A 19850816

Abstract (en)

[origin: WO8601565A1] A locking apparatus for blind fasteners providing improved yield and fatigue performance of the blind fasteners. The locking apparatus utilizes a locking collar (28) which will slide over the fastener stem (16) and within the tubular rivet sleeve (10) of the fastener without preforming into the locking groove (24) on the stem. The locking collar (28) is formed so that upon the pulling of the stem (16) during installation of the blind fastener, specially formed tapered reliefs (38, 42) in the locking collar (28) then adjacent the locking groove on the stem (16) cause the region of the locking collar immediately thereabove to be encouraged tightly inward against the locking groove to provide a particular tight fit in the locking groove. At the same time, a specially tapered top end (48) of the locking collar (28) is flared outward into the recess in the fastener head, and the tubular shank expands in compression to take up any clearances thereabout, all of the foregoing occurring before the breaking of the pulling portion of the stem occurs. The net result is that the flared portion of the locking collar (28) fits tightly in the recess, the other end of the locking collar fits tightly in the locking groove (24) and the cylindrical portion therebetween fits tightly on the adjacent portion of the stem and tightly within the adjacent portion of the rivet sleeve (10), independent of reasonable variations in the dimensions of the various components of the blind fastener within the dimensional tolerances of such component.

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IPC 8 full level

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- No further relevant documents have been disclosed.
- See references of WO 8601565A1

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