Title (en)

Punch ring

Title (de)

Ringförmiges Stanzwerkzeug

Title (fr)

Outil de poinçonnage circulaire

Publication

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Application

EP 00307574 A 20000901

Priority

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- US 64536500 A 20000824

Abstract (en)

An improved punch ring (40) for a hole punching system used to punch lines of holes in a passing paper web. The ring (40) has a punch receiving portion (42). The punch receiving portion (42) includes a number of radially extending grooves (54) spaced about the circumference of the punch receiving portion (42) to receive hardened punches (56). The punch receiving portion (42) also includes a number of cylindrical bores (50) extending through the punch receiving portion (42) between adjacent pairs of the grooves (54) that each receive a clamp screw (52). A clamp ring (44) includes a number of threaded apertures (62) alignable with the bores (50) in the punch receiving portion (42). The clamp ring (44) is placed against the punches (56) in the grooves (54). Clamp screws (42) are inserted through the bores (50) to engage the threaded apertures (62) in the clamp ring (44) to hold the clamp ring (44) in engagement with the punch receiving portion (42) and retain the punches (56) in the grooves (54). The use of the clamp ring (44) avoids the problems heretofore encountered when screws are used to hold punches in a punch ring. Furthermore, the separate clamp ring (44) eliminates the need for the removal of the entire punch ring (40) and shaft from the system should the threads in the clamp ring (44) become damaged by the clamp screws (52). <IMAGE>

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