

Publication

EP 0941955 A3 19990922

Application

EP 99102588 A 19990211

Priority

DE 19807897 A 19980225

Abstract (en)

[origin: US6250580B1] Process and winding machine for the continuous winding of a web of material onto a reel spool to form a reel. The process includes forming a winding nip between a peripheral zone of a reel drum the reel, guiding the material web over the peripheral zone of the reel drum, positioning the reel in a secondary zone, and displacing and pressing the reel drum against the reel in the secondary zone. In this manner, one of control and regulation of a linear force in the winding nip occurs through the displacement of the reel drum. Upon obtaining a completed reel having a desired reel diameter, the process includes moving the reel drum into a temporarily fixed position, introducing a new, empty reel spool into a primary zone, forming another winding nip between the new spool and the reel drum through a relative movement of the new reel spool with respect to the reel drum in the temporarily fixed position, cutting the material web, winding the material web onto the new reel spool to form a new reel, and removing the completed reel. The process also includes transferring the new reel spool from the primary zone to the secondary zone, releasing the reel drum from the temporarily fixed position, and displacing the reel drum for one of the control and regulation of the linear force in the winding nip between the reel drum and the new reel spool in the secondary zone. The winding machine includes a reel drum arranged to form a winding nip with the reel, a primary mount adapted to hold a new reel spool, wherein the primary mount is further adapted to displace the new reel spool along a first guide path substantially radially to the reel drum, and a secondary mount coupled to the reel spool. The machine also includes a pressure device coupled to the reel drum, which is adapted to move the reel drum at least substantially horizontally when the reel spool is in the secondary mount, and which is further adapted to at least temporarily fix a position of the reel drum when the new reel spool is in the primary mount.

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IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 5249758 A 19931005 - MUELLER GERNOT [DE], et al
- [A] DE 3635197 C1 19880211 - BASTIAN WICKELTECHNIK GMBH
- [DA] DE 3539980 A1 19860528 - VALMET OY [FI], et al
- [PDA] DE 19735590 A1 19981119 - VOITH SULZER PAPIERMASCH GMBH [DE]
- [A] DE 4007329 A1 19910912 - VOITH GMBH J M [DE]
- [A] WO 9324401 A1 19931209 - BELOIT TECHNOLOGIES INC [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 045 (M - 667) 10 February 1988 (1988-02-10)

Cited by

EP1291310A3; EP1535870A3; WO03011727A1

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