

Title (en)
EFFECTIVE CIRCUMFERENCE-BASED WRAPPING

Title (de)
WIRKSAME UMFANGSBASIERTE UMWICKLUNG

Title (fr)
EMBALLAGE EFFICACE BASÉ SUR LA CIRCONFÉRENCE

Publication
EP 3323734 B1 20200701 (EN)

Application
EP 17200602 A 20131025

Priority

- US 201261718433 P 20121025
- US 201261718429 P 20121025
- EP 13788850 A 20131025
- US 2013066823 W 20131025
- US 201314062930 A 20131025

Abstract (en)
[origin: EP3323734A1] A wrapping apparatus (100) and method utilize an effective circumference-based wrap speed model that dynamically controls the rate at which packaging material (108) is dispensed based on an effective circumference of a load (110) during relative rotation established between the load and a packaging material dispenser (106). The effective circumference of a load may be indicative of an effective consumption rate of the load, and may refer to a dimension or size of a tangent circle (420) that is substantially centered at the center of rotation (408) of the load and substantially tangent to a line substantially extending between a first point (414) proximate to where the packaging material exits the dispenser and a second point (418) proximate to where the packaging material engages the load. The effective circumference of the load dynamically changes throughout the relative rotation of the load, and by controlling the dispense rate based at least in part on this dimension, fluctuations in tension in the packaging material may be reduced, often enabling containment force to be increased while reducing the risk of breakage in the packaging material.

IPC 8 full level
B65B 11/02 (2006.01); **B65B 11/04** (2006.01)

CPC (source: EP US)
B65B 11/025 (2013.01 - EP); **B65B 11/045** (2013.01 - EP); **B65B 57/04** (2013.01 - US)

Cited by
EP4116671A1; US11906287B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3323734 A1 20180523; EP 3323734 B1 20200701

DOCDB simple family (application)
EP 17200602 A 20131025