Title (en)

Cutting device of a slitter to make a line of cut with a wave shape

Title (de)

Längsschneidvorrichtung zum Erzeugen eines wellenförmigen Schnitts

Title (fr)

Dispositif de coupe longitudinal pour faire une ligne de coupe avec une forme ondulante

Publication

EP 1555094 A1 20050720 (EN)

Application

EP 04030951 A 20041229

Priority

KR 20040001030 U 20040114

Abstract (en)

The present invention discloses a slitter subdividing, cutting and rewinding a wide roll stock, such as a plastic film or a metal deposition film for a metalized plastic film capacitor, and more particularly a cutting device of a slitter making a section area of a plastic film have a constant wave shape during the process of cutting the plastic roll stock, to increase surface area of a metal contact area formed in the section area of the constant wave shape in the following manufacturing process of a capacitor, and to enhance capability of the produced capacitor greatly, as a result, while the slitter makes a film roll stock rewound to an unwinder installed in the one side of the slitter run through multiple rollers, cuts the film roll stock into a predetermined interval by a pair of a cutting roller and a cutting device installed on the top of the pair of the cutting roller, makes the films cut from the film roll stock by the pair of the cutting roller and the cutting device run again through another multiple rollers, and rewinds the films cut form the film roll stock to a first and a second rewinding axes moving horizontally to the slitter according to the rewinding amount, wherein the cutting device comprises multiple rounded cutter arranged and fixed into a fixing shaft in predetermined intervals through a fixing hole, curved in a predetermined angle θ by the standard of a main line of the cutter; and the cutting device is connected with a motor controlling a rotation speed to form a wave shape, such as a sine wave, to a section area of the film roll stock in the case of cutting the film roll stock. <IMAGE>

IPC 1-7

B26D 3/10

IPC 8 full level

B26D 3/00 (2006.01); **B26D 1/00** (2006.01); **B26D 1/24** (2006.01); **B26D 1/28** (2006.01); **B26D 3/10** (2006.01); **B65H 16/06** (2006.01); **B65H 75/26** (2006.01); **H01G 13/00** (2013.01)

CPC (source: EP KR)

B26D 1/0006 (2013.01 - EP); **B26D 1/14** (2013.01 - KR); **B26D 1/285** (2013.01 - EP); **B26D 3/10** (2013.01 - EP); **B65H 16/06** (2013.01 - EP); **B65H 75/26** (2013.01 - EP); B26D 2001/0033 (2013.01 - EP); B26D 2001/006 (2013.01 - EP); B65H 2301/4148 (2013.01 - EP); B65H 2301/41486 (2013.01 - EP)

Citation (search report)

- [X] EP 1340601 A2 20030903 - ARCOTRONICS ITALIA SPA [IT]
- [X] GB 2191969 A 19871231 - CHOU JIN JONG
- [X] US 4641559 A 19870210 - CASTIGLIONI GIOVANNI P [IT]
- [A] US 3248987 A 19660503 - GUY CARDINET, et al

Cited by

ITUB20159524A1; CN102306557A; EP2298675A1; EP2298676A1; WO2011034767A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1555094 A1 20050720; JP 2005324315 A 20051124; KR 200347587 Y1 20040414

DOCDB simple family (application)

EP 04030951 A 20041229; JP 2005007294 A 20050114; KR 20040001030 U 20040114