

Title (en)

DEVICE AND METHOD FOR TRANSVERSELY FOLDING A WEB SECTION AND HYGIENIC TISSUE

Title (de)

VORRICHTUNG UND VERFAHREN ZUM QUERFALTEN EINES BAHNABSCHNITTS UND HYGIENETUCH

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR LE PLIAGE TRANSVERSAL D'UNE PARTIE DE BANDE ET PAPIER-MOUCHOIR HYGIÉNIQUE

Publication

EP 2627594 B1 20150513 (DE)

Application

EP 11781743 A 20111017

Priority

- DE 102010048410 A 20101015
- EP 2011005207 W 20111017

Abstract (en)

[origin: WO2012048904A1] By means of a device (2) for transversely folding a web section (70), a web section, in particular a handkerchief, is to be folded to 1/3 of an edge length thereof. This is achieved by using a device (2) having a central folding cylinder (8) and a first and a second pre-crease folding cylinder (14, 20), wherein the respective axes of rotation of the folding cylinders (8, 14, 20) are oriented parallel to each other, wherein the direction of rotation of the central folding cylinder (8) is opposite to the direction of rotation of the first and second pre-crease folding cylinders (14, 20), wherein the folding cylinders (8, 14, 20) each have controllable suction orifices for applying suction to the web section (70). The device has a plurality of ironing shafts, wherein the central folding cylinder (8) has a first suction orifice (82) for transporting the web section (70) to the first pre-crease folding cylinder (14), and wherein the central folding cylinder (8) is provided with a third suction orifice (94) and the first pre-crease folding cylinder (14) is provided with a second suction orifice (88), the suction action of which on the web section (70) creates a 1/3 fold (140) at the front end (76) of said section, and wherein the second pre-crease folding cylinder (20) has a sixth suction orifice (100), the suction action of which on the web section (70) produces a fold in the web section (70), wherein the web section (70) is firmly held on the central folding cylinder (8) by a fourth and a fifth suction orifice (112, 118) in said cylinder. The invention further relates to a corresponding method and to a hygienic tissue.

IPC 8 full level

A47K 10/16 (2006.01); **B65H 45/04** (2006.01); **B65H 45/12** (2006.01); **B65H 45/16** (2006.01); **B65H 45/28** (2006.01)

CPC (source: EP)

B65H 45/04 (2013.01); **B65H 45/16** (2013.01); **B65H 45/165** (2013.01); **B65H 45/28** (2013.01); **B65H 2406/33** (2013.01)

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)

DE 102011116003 A1 20120419; DE 102011116003 B4 20150108; CN 103282295 A 20130904; CN 103282295 B 20160928;
EP 2627594 A1 20130821; EP 2627594 B1 20150513; WO 2012048904 A1 20120419

DOCDB simple family (application)

DE 102011116003 A 20111017; CN 201180059619 A 20111017; EP 11781743 A 20111017; EP 2011005207 W 20111017