

Title (en)

PROCESS FOR MANUFACTURING A RELEASE LINER BY PLASMA DEPOSITION

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER TRENNSCHICHT MITTELS PLASMAABSCHEIDUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UN REVÊTEMENT ANTI-ADHÉSIF PAR DÉPÔT DE PLASMA

Publication

EP 3030494 A1 20160615 (EN)

Application

EP 14749982 A 20140731

Priority

- GB 201314334 A 20130809
- GB 2014052364 W 20140731

Abstract (en)

[origin: GB2516978A] A release liner is produced by providing a web of film 11; subjecting at least a first surface of the film web to a first plasma discharge treatment 14 in the presence of a gas (introduced at 13) which effectively functionalises the first surface of the film web to provide thereon functional groups which are capable of actively binding to a release compound and/or a precursor thereof; and subsequently depositing a coating of a release compound (introduced at 16) onto the functionalised (with ketone, aldehyde, glyoxyl, amide, amine, hydroxide, nitride or vinyl groups) first surface of the film web by contacting the release compound and/or a precursor thereof with the functionalised first surface during a second plasma discharge treatment 17. The exemplified film 11 comprises a coextruded bubble film having a polypropylene core ethylene propylene copolymer skins. It is subjected to dielectric barrier discharge plasma treatments with ammonia in nitrogen and then with hexamethyl disiloxane in nitrogen, to produce a 50nm thick polydimethylsiloxane release coating. The release liners can be used with pressure sensitive adhesive labels and packaging films.

IPC 8 full level

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CPC (source: EP GB)

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Citation (search report)

See references of WO 2015019063A1

Citation (examination)

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