

Title (en)

A PROCESS AND AN APPARATUS FOR BAG FORMATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BEUTELFORMUNG

Title (fr)

PROCÉDÉ ET APPAREIL DE FORMATION DE SAC

Publication

**EP 4017808 A4 20231025 (EN)**

Application

**EP 20856720 A 20200819**

Priority

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Abstract (en)

[origin: WO2021038387A1] This invention relates to process and apparatus for making bags from polymer web materials, in particular polyolefines using adhesive bonding. It is well known that hot air welding/seaming systems used in such processes cause undesirable and uncontrolled deterioration in fabric strength. The invention discloses a process where surface enhancement techniques are used on surfaces to be joined together before joining them by using adhesives. There is an overall reduction in bag weight, increase in production speed, and increase in bond strength of joints. The invention also discloses an apparatus which has at least four stations: a first station (15), a second station (16), a third station (17), and a fourth station (18), wherein in each of said second, third, and fourth stations (16, 17 and 18), a sealing unit (19) having at least one unit (3) for surface enhancement treatment and at least one adhesive applicator (8) for applying adhesives as affixing means to surfaces that are affixed to each other are provided.

IPC 8 full level

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Citation (search report)

- [XY] US 3448666 A 19690610 - KAPPELHOFF HERMANN, et al
- [Y] WO 2016189541 A1 20161201 - CHATURVEDI ASHOK [IN]
- [Y] US 2017283657 A1 20171005 - HÄHNEL MARCEL [DE]
- [Y] WO 2004030829 A1 20040415 - WINDMOELLER & HOELSCHER [DE], et al
- [A] US 3554828 A 19710112 - SCHMEDDING HERBERT, et al
- [A] WO 9530598 A1 19951116 - STARLINGER & CO GMBH [AT], et al
- See also references of WO 2021038387A1

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