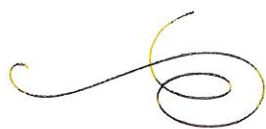


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The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Katherine Kelly Vidal

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



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(54) **BAG CLOSURE APPLYING UNIT AND BAG CLOSURE DEVICE WITH SUCH BAG CLOSURE APPLYING UNIT**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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B65B 51/04 (2006.01)

(52) **U.S. Cl.**
CPC **B65B 51/046** (2013.01); **B65B 51/043** (2013.01)

(58) **Field of Classification Search**
CPC B65B 1/04; B65B 1/043; B65B 1/046
See application file for complete search history.

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(57) **ABSTRACT**

A bag closure applying unit is provided for attaching a bag closure, for example, a "Kwik Lok" type and/or "Schutte" type of bag closure, to a bag. The bag closure applying unit includes an elongated housing having a first end and a second end, opposite to the first end, and a guiding channel extending between the first end and the second end. The guiding channel is configured for receiving a strip of bag closures. The bag closure applying unit further includes a moving mechanism configured for engaging the strip of bag closures and for moving the strip of bag closures through the guiding channel. The moving mechanism includes two engaging arms for engaging the strip of bag closures. The engaging arms are configured to engage the strip of bag closures at the longitudinal sides thereof.

28 Claims, 6 Drawing Sheets

