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Aoyama

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(54) **BYPASS FEEDER AND DOOR ON AN IMAGE FORMING APPARATUS**

(58) **Field of Classification Search**
CPC E05F 5/06; E05F 5/08; E05F 3/227
See application file for complete search history.

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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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This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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(57) **ABSTRACT**

(51) **Int. Cl.**
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E05F 5/08 (2006.01)

A bypass feeder, which is included in an image forming apparatus, includes an opening/closing unit opening and closing with respect to an apparatus body between a unit closed state and a unit open state, a bypass tray opening and closing with respect to the opening/closing unit between a tray closed state and a tray open state, a linkage including a flexible-member fixing member and connecting the opening/closing unit to the apparatus body, and a flexible member having one end fixed to the fixing member and the other end fixed to the bypass tray. When the opening/closing unit is changed to the unit open state while the bypass tray is rotated away from the opening/closing unit to the tray open state, the fixing member of the linkage shifts by pulling the flexible member to hold the bypass tray at a substantially horizontal line with respect to a sheet loading surface.

(52) **U.S. Cl.**
CPC **G03G 15/6514** (2013.01); **E05F 5/08** (2013.01); **G03G 15/6529** (2013.01); **G03G 21/1633** (2013.01); **G03G 21/1647** (2013.01); **G03G 21/1695** (2013.01); **B65H 2402/45** (2013.01); **G03G 2215/00544** (2013.01); **G03G 2221/169** (2013.01); **G03G 2221/1675** (2013.01); **G03G 2221/1687** (2013.01)

16 Claims, 11 Drawing Sheets

