

(12) **United States Patent**  
**Boettcher**

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(54) **POSITIONING STOP ASSEMBLY FOR A REPLACEABLE UNIT OF AN ELECTROPHOTOGRAPHIC IMAGE FORMING DEVICE**

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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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**Related U.S. Application Data**

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See application file for complete search history.

(57) **ABSTRACT**

A replaceable unit for an electrophotographic image forming device includes a housing and a positioning stop on the housing that is translatable between a latching position and an unlatching position. The positioning stop limits the travel of the replaceable unit in the image forming device when the positioning stop is in the latching position. A compression spring that biases the positioning stop toward the latching position is positioned in line with the translation of the positioning stop between the positioning stop and a first side of a post on the housing. A deflectable arm extends from the positioning stop in line with the translation of the positioning stop proximate the compression spring. The deflectable arm includes a hook that wraps over the post in position to contact a second side of the post to limit translation of the positioning stop away from the post.

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**16 Claims, 15 Drawing Sheets**

