



US009409345B1

(12) **United States Patent**
Bibeau

(10) **Patent No.:** **US 9,409,345 B1**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **METHOD AND APPARATUS FOR FORMING VINYL WINDOW CORNERS**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Dennis Bibeau**, Swansea, MA (US)

DE 19529852 B4 * 3/2004
GB 2350318 A * 11/2000
JP 2007136941 A * 6/2007

(72) Inventor: **Dennis Bibeau**, Swansea, MA (US)

OTHER PUBLICATIONS

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

Machine translation of JP 2007136941 date unknown.*

* cited by examiner

(21) Appl. No.: **14/861,134**

Primary Examiner — John Goff

(22) Filed: **Sep. 22, 2015**

(74) *Attorney, Agent, or Firm* — Salter & Michaelson

(51) **Int. Cl.**

B29C 65/20 (2006.01)
B29C 65/00 (2006.01)
B29L 12/00 (2006.01)
B29L 31/00 (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.**

CPC **B29C 65/20** (2013.01); **B29C 66/0044** (2013.01); **B29C 66/5243** (2013.01); **B29L 2012/00** (2013.01); **B29L 2031/778** (2013.01)

A system and method for fabricating the corner of a plastic window frame. The system includes a metal platen having opposed sides and that is for heating and melting adjacently disposed frame pieces by being inserted between the adjacently disposed frame pieces as the adjacently disposed frame pieces are brought into contact with respective opposed sides of the metal platen in order to melt adjacent surfaces of the adjacently disposed frame pieces. The adjacently disposed frame pieces, once heated and melted, are drawn together to form the corner of the vinyl window frame. A release layer is secured to the opposed sides of the metal platen and disposed between the respective adjacently disposed frame pieces and the opposed sides of the metal platen to prevent adherence between the metal platen and frame pieces. The release layer is comprised of a release film having a work area corresponding to an area where the adjacently disposed frame pieces are to be joined and a non-work area outside of the work area, and at least one adhesive strip is disposed within the non-work area for securing the release film to the metal platen while the work area is absent any adhesive between the release layer and the metal platen.

(58) **Field of Classification Search**

CPC B29C 65/20; B29C 65/2061; B29C 65/2007; B29C 65/2053; B29C 65/2092; B29C 66/5243; B29C 66/52431; B29C 66/1162; B29C 66/0044; B29C 65/2076; B29C 66/00441; B05B 15/0456
USPC 156/291, 289, 323, 583.1
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,752,304 A * 8/1973 Alef B05B 15/0456 118/505
4,981,546 A * 1/1991 Bergevin B29C 65/226 156/515
5,631,055 A * 5/1997 Vines B05B 15/0456 118/504

8 Claims, 5 Drawing Sheets

