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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

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David J. Kyffos

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US007658353B2

(12) **United States Patent**
Ford

(10) **Patent No.:** **US 7,658,353 B2**

(45) **Date of Patent:** **Feb. 9, 2010**

(54) **ADJUSTABLE SUPPORTS FOR MOUNTING A PLANAR OBJECT BETWEEN OPPOSED SURFACES**

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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 316 days.

(21) **Appl. No.:** **11/748,945**

(22) **Filed:** **May 15, 2007**

(65) **Prior Publication Data**

US 2007/0241245 A1 Oct. 18, 2007

Related U.S. Application Data

(63) Continuation-in-part of application No. 11/406,417, filed on Apr. 18, 2006.

(51) **Int. Cl.**
F16M 11/00 (2006.01)

(52) **U.S. Cl.** **248/201; 248/231.41; 248/228.5; 248/276.1; 248/292.12; 248/229.11; 248/229.12; 269/137**

(58) **Field of Classification Search** **248/200.1, 248/228.3, 228.1, 228.2, 228.5, 231.41, 276.1, 248/292.12, 292.11, 229.12, 201; 267/137, 267/195; 182/36; 24/580; 269/137, 195**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,760,346 A 5/1930 Correa

2,548,248 A *	4/1951	Wiebe	242/580
2,552,738 A *	5/1951	Renner	269/194
4,805,889 A *	2/1989	Liepse	269/210
5,324,013 A *	6/1994	Marino	269/137
5,634,618 A *	6/1997	Farmer et al.	248/201
6,076,633 A *	6/2000	Whitmer	182/36
6,126,158 A	10/2000	Engibarov	
7,533,751 B2 *	5/2009	Handa et al.	180/210

* cited by examiner

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(57) **ABSTRACT**

The present invention is an adjustable support for installing a planar sheet of material between opposed surfaces for protection from events such as storms. The supports secure the planar sheet to an opening such as a door and window, thereby holding it in place during storms, etc. The supports are easily removed and include a substantially L-shaped base and a clamp. The clamp is removably and adjustably attached to the first side of the L-shaped base, thereby forming an aperture between the second side of the L-shaped base and the bottom surface of the clamp. The aperture is adaptable to accept various thicknesses of substantially planar objects. A device is provided for engaging the adjustable support with a support structure, passing through the clamp and passing through a hole in the first side of the L-shaped base and interfacing with support surfaces to hold the substantially planar object between the first support surface and a substantially opposed second support surface.

12 Claims, 7 Drawing Sheets

