

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 January 2003 (23.01.2003)

PCT

(10) International Publication Number
WO 03/006835 A1

(51) International Patent Classification⁷: **F16B 7/22**,
7/04, 2/18, F24F 13/20

(21) International Application Number: PCT/US02/22467

(22) International Filing Date: 11 July 2002 (11.07.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/904,673 13 July 2001 (13.07.2001) US

(71) Applicant: **CARRIER CORPORATION** [US/US]; Car-
rier Parkway, P.O. Box 4800, Syracuse, NY 13221 (US).

(72) Inventors: **HERBECK, Christain, C.**; 91 Grandview
Drive, Manchester, TN 37355 (US). **AUSTIN, Michael**,

W.; 162 Barbara Circle, McMinnville, TN 37110 (US).
JOHNSON, Walter, A., Jr.; 1302 Fawn Street, Tullahoma,
TN 37388 (US). **RUHL, Timothy, E.**; 848 Tennessee Hill
Lane, Manchester, TN 37355 (US). **HOCH, Peter, J.**; 247
Meadowbrook Drive, McMinnville, TN 37110 (US).

(74) Agent: **HABELT, William, W.**; Carrier Corporation, In-
tellectual Property Department, Carrier Parkway, P.O. Box
4800, Syracuse, NY 13221 (US).

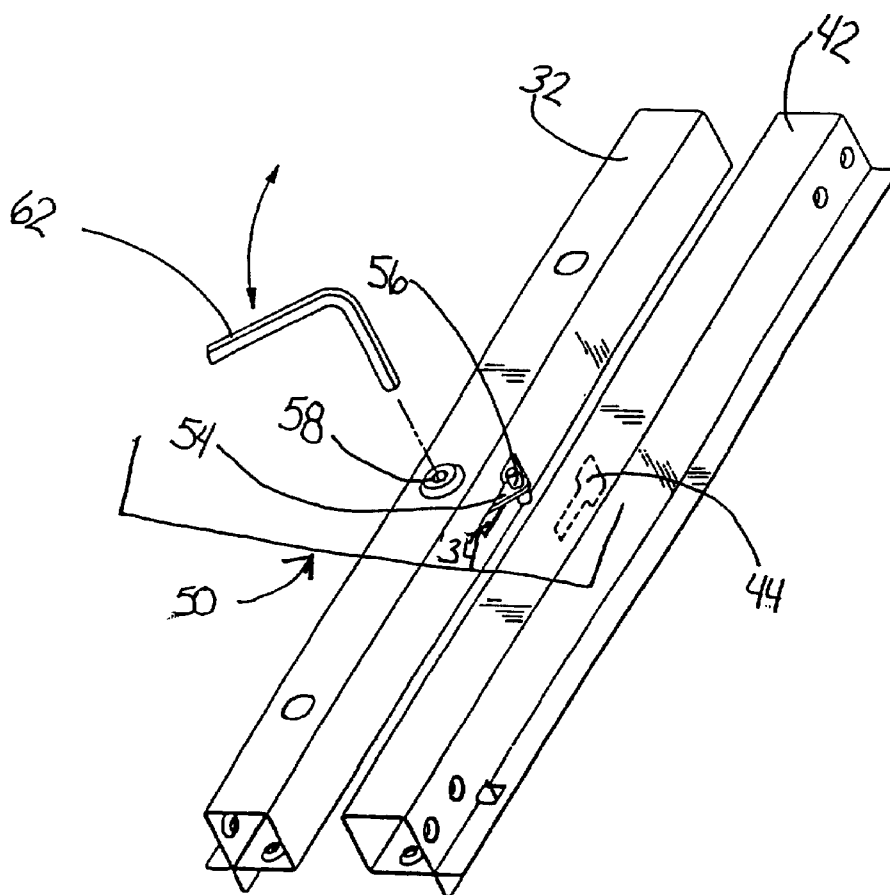
(81) Designated States (*national*): AU, BR, CA, CN, ID, IL,
IN, JP, KR, MX, NO, NZ, PL, RU, SG, TR, YU, ZA.

(84) Designated States (*regional*): European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
LU, MC, NL, PT, SE, SK, TR).

Published:
— with international search report

[Continued on next page]

(54) Title: LOCKING MECHANISM FOR AIR HANDLER (AHU) CABINET



(57) Abstract: A locking mechanism (50) for an air handling duct (10) which includes a plurality of interconnected modules which together made up the duct. The locking mechanism includes a male retainer contained on a frame member of a first module, with the male retainer having a locking arm (54) adapted to be moved from an unlocked position to a locked position. A complementary female retainer (46) is contained on a frame member of a second module, with the female retainer being in the form of an elongated keyway designed to receive and hold the locking arm in a locked position. Means (62) are provided to move the arm from an unlocked position to a locked position when the male and female retainers are in alignment for locking the modules together.

WO 03/006835 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.