

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : E05C 1/06	A1	(11) International Publication Number: WO 97/13947 (43) International Publication Date: 17 April 1997 (17.04.97)
(21) International Application Number: PCT/US95/12513 (22) International Filing Date: 13 October 1995 (13.10.95) (71) Applicant (for all designated States except US): EMPAK, INC. [US/US]; 950 Lake Drive, Chanhassen, MN 55317 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): GREGGSON, Barry [US/US]; 19550 Excelsior Boulevard, Deephaven, MN 55331 (US). (74) Agent: DIETZ, Paul, T.; Haugen and Nikolai, P.A. , 820 International Centre, 900 Second Avenue South, Minneapolis, MN 55402-3325 (US).	(81) Designated States: CA, CN, JP, KP, KR, SG , US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.	

(54) Title: VACUUM ACTUATED MECHANICAL LATCH

(57) Abstract

A vacuum actuated mechanical latch (34) which is attachable to a hermetically sealable container (10) is described. The latch (34) is attached, formed, or otherwise integral with the door (12) of the container (10). The latch (34) is easily engaged and disengaged by processing equipment (14). Also, the latch (34) is designed to minimize the amount of abraded particulate and further isolates any particulate generated. Further, when the door (12) is latched to the container (10), the latch (34) is not easily overcome by jarring or bumping. The lead-in surface (88) of the latch (34) is angled to minimize friction when the latch (34) is forced into a first locking position.

