



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> (21) International Application Number: PCT/EP99/08131 (22) International Filing Date: 27 October 1999 (27.10.99) (30) Priority Data: 98308823.8 28 October 1998 (28.10.98) EP (71) Applicant (for all designated States except US): CRYOVAC, INC. [US/US]; 100 Rogers Bridge Road, Building A, Duncan, SC 29334-0464 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): EVANGELISTI, Riccardo [IT/IT]; Via Vergiate, 3, I-20151 Milano (IT). CAILLIER, Joel [FR/FR]; 44 Grand Pre, F-69210 Lentilly (FR). (74) Agents: BARLOW, Roy, James et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5LX (GB). </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 3 August 2000 (03.08.00) </td> </tr> </table>			(21) International Application Number: PCT/EP99/08131 (22) International Filing Date: 27 October 1999 (27.10.99) (30) Priority Data: 98308823.8 28 October 1998 (28.10.98) EP (71) Applicant (for all designated States except US): CRYOVAC, INC. [US/US]; 100 Rogers Bridge Road, Building A, Duncan, SC 29334-0464 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): EVANGELISTI, Riccardo [IT/IT]; Via Vergiate, 3, I-20151 Milano (IT). CAILLIER, Joel [FR/FR]; 44 Grand Pre, F-69210 Lentilly (FR). (74) Agents: BARLOW, Roy, James et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5LX (GB).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 3 August 2000 (03.08.00)
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(54) Title: VACUUM PACKAGING MACHINE				
(57) Abstract A vacuum packaging machine for performing a vacuum sealing operation on product packages, comprises a vertical stack of vacuum chambers (4) which each manage to receive at least one unsealed product package (2) and are operable to perform an independent vacuum sealing operation on the at least one product package (2). A conveyor arrangement (8, 9) is operable to load and unload a selected vacuum chamber (4) with the at least one product package, and the machine is arranged to operate the respective vacuum chambers (4) to perform the vacuum sealing operation while the conveyor arrangement is operated to load and unload another vacuum chamber (4). The conveyor arrangement loads and unloads the vacuum chambers in sequence, and the vacuum chambers are synchronously operated to perform the vacuum sealing operation to allow the conveyor arrangement to operate continuously. The conveyor arrangement comprises at least one in-feed conveyor (8) and at least one out-feed conveyor (9) which are independently movable to select the vacuum chamber to be loaded and unloaded. There may be a plurality of in-feed conveyors (8) and a plurality of out-feed conveyors (9). The vacuum chambers each have a sealing bar arranged along one side for sealing the product packages (2).				

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 99/08131

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65B31/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65B B65G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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