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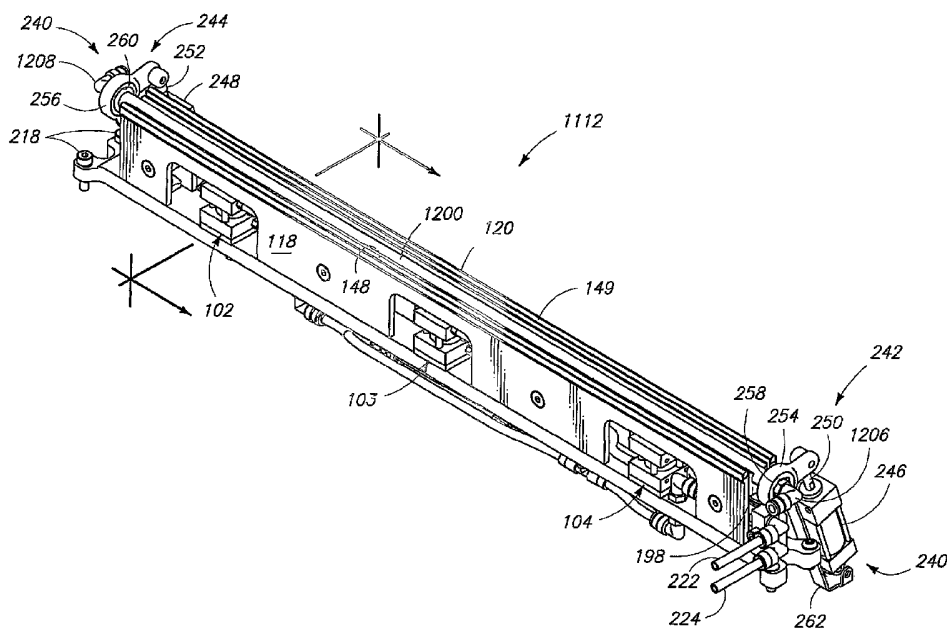
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[Continued on next page]

(54) Title: HEAT SEAL APPARATUS, BAG MACHINE, BAG EDGE FORMING APPARATUS, AND BAG SEAL MACHINE HAVING REPOSITIONABLE SEAL BAR ANVIL



(57) Abstract: An apparatus is provided for forming bag edges in a layered plastic film. The apparatus includes a heated seal bar and a seal bar anvil. The seal bar anvil has a resilient tube configured to deform as the seal bar is driven into the tube to seal and sever a bag edge therebetween. According to one construction, the resilient tube is pressurized pneumatically from the inside so as to impart a specific, desired resilience to the tube as the tube and seal bar co-act on either side of the layered plastic film.

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 493/189

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)

U.S. : 493/189, 203, 207, 209, 470, 156/380.1, 580, 583.1, 53/373.7, 374.2

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,449,962 (Copia) 22 May 1984 (22.05.1984), see the entire reference.	36, 40, 45 and 50
A	US 4,630,429 (Christine) 23 December 1986 (23.12.1986), see the entire reference.	1-55
A	US 5,247,779 (Wirsig et al.) 28 September 1993 (28.09.1993), see the entire reference.	1-55
A	US 5,714,033 (Hayashi et al.) 03 February 1998 (03.02.1998), see the entire reference.	1-55
A	US 6,167,681 (Yano et al.) 02 January 2001 (02.01.2001), see the entire reference.	1-55
A	US 6,422,986 (Claybaker et al.) 23 July 2002 (23.07.2002), see the entire reference.	1-55



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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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