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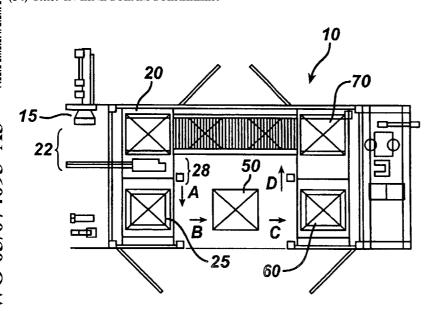
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(54) Title: IN-LINE STEAM STERILIZER



(57) Abstract: A sterilization apparatus and method automatically transporting plurality of ophthalmic lenses packages containing ophthalmic lenses to be sterilized through an in-line apparatus, without off-loading packages from the line, for transport through a sterilizer under optimum conditions of temperature and time for enabling increased throughput.

WO 03/074093 A3

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a. classification of subject matter IPC 7 A61L2/24 A611 B65B55/02 A61L12/04 A61L2/07 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 A61L B65B 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) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° US 5 577 367 A (ABRAMS RICHARD W ET AL) 1 - 12Χ 26 November 1996 (1996-11-26) cited in the application column 6, line 35 -column 8, line 12 column 10, line 17 - line 25 1 - 12EP 0 691 270 A (JOHNSON & JOHNSON VISION Χ PROD) 10 January 1996 (1996-01-10) cited in the application column 5, line 11 - line 16 column 7, line 54 -column 8, line 14 column 12, line 26 - line 41 US 5 786 598 A (DUNN JOSEPH E ET AL) 1-5,12Х 28 July 1998 (1998-07-28) column 7, line 61 -column 8, line 67; figures 1,3-6 -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. ° Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or " document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search .17. 09.03 7 July 2003 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Katsoulas, K

International Application No // US 03/05946

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C.(Continua Category °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Calegory	Original of document, with indication, where appropriate, or the following passages	
Х	US 5 618 492 A (AUTEN RICHARD D ET AL) 8 April 1997 (1997-04-08) column 3, line 14 - line 56	1,3,12
X	US 5 696 686 A (PRICER KENNETH KURT ET AL) 9 December 1997 (1997-12-09) column 7, line 45 -column 8, line 46	1,12

Information on patent family members

International Application No

T/US 03/05946

				1	
Patent document cited in search report		Publication date	-	Patent family member(s)	Publication date
US 5577367	A	26-11-1996	US AU AU CA DE DE JP SG AU AU BR CZ DE DE DE DE DE AU	5488815 A 188875 T 710284 B2 5084696 A 2175325 A1 69606223 D1 69606223 T2 0745536 A2 9218383 A 79919 A1 390857 B 178549 T 706708 B2 2058195 A 9502759 A 2151337 A1 9501458 A3 69508855 D1 69508855 T2 0691270 A2 8126688 A 9504811 A	06-02-1996 15-02-2000 16-09-1999 14-11-1996 02-11-1996 24-02-2000 04-12-1996 19-08-1997 17-04-2001 21-05-2000 15-04-1999 24-06-1999 24-06-1995 16-01-1996 11-12-1995 13-08-1997 12-05-1999 19-08-1999 10-01-1996 09-12-1996
EP 0691270	Α	10-01-1996	US AT AU BR CA CZ DE DE US JP US	5488815 A 178549 T 706708 B2 2058195 A 9502759 A 2151337 A1 9501458 A3 69508855 D1 69508855 T2 0691270 A2 8126688 A 5577367 A 9504811 A	06-02-1996 15-04-1999 24-06-1999 21-12-1995 16-01-1996 11-12-1995 13-08-1997 12-05-1999 19-08-1999 10-01-1996 21-05-1996 26-11-1996
US 5786598	A	28-07-1998	AU AU EP JP US WO US US	710860 B2 3000797 A 0912111 A1 2000511497 T 2003155531 A1 9743915 A1 6566659 B1 6433344 B1 5925885 A	30-09-1999 09-12-1997 06-05-1999 05-09-2000 21-08-2003 27-11-1997 20-05-2003 13-08-2002 20-07-1999
US 5618492	A	08-04-1997	AT AU DE DE WO EP I L JP ZA	197552 T 3346195 A 69519436 D1 69519436 T2 9605869 A1 0777501 A1 114970 A 10504482 T 9507010 A	15-12-2000 14-03-1996 21-12-2000 07-06-2001 29-02-1996 11-06-1997 20-06-1999 06-05-1998 18-02-1997
		09-12-1997	US	5461570 A	24-10-1995

International application No. PCT/US 03/05946

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)					
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:					
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:					
з. 📗	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).					
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)						
This Inte	ernational Searching Authority found multiple inventions in this international application, as follows:					
	see additional sheet					
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.					
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.					
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:					
4. X	No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-13					
Remar	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.					

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-13

Claims 1-13 define a apparatus for sterilizing ophthalmic lens packages comprising a sterilisation chamber, trasporting means, sterilization means, wherein the sterilization chamber is disposed contiguously with prior processing stations and secondary packaging stations of a manufacturing line.

2. Claim: 14

Claim 14 defines a sterilizing tray (suitable) for conveying ophthalmic lens packages through a sterilization chamber, comprising an external surrounding wall, a number of internal divider walls, each wall comprising a plurality of cavities for holding a plurality of packages, wherein the tray is suitable for supporting the weight of a plurality of trays and for enduring the sterilization cycles.

Information on patent family members

International Application No

T/US 03/05946

Patent document cited in search report	Publication date		Patent family member(s)	Publication date			
US 5696686 A		AU	695614 B2	20-08-1998			
		ΑU	5084896 A	14-11-1996			
		CA	2175316 A1	02-11-1996			
		EP	0750914 A1	02-01-1997			
,		SG	43364 A1	17-10-1997			
		TW	513667 B	11-12-2002			
		ΑT	205313 T	15-09-2001			
		ΑU	704451 B2	22-04-1999			
		ΑU	2057495 A	21-12-1995			
		BR	9502755 A	05-08-1997			
		CA	2151357 A1	11-12-1995			
		CZ	9501467 A3	12-06-1996			
		DE	69522500 D1	11-10-2001			
		DE	69522500 T2	16-05-2002			
		EP	0686900 A2	13-12-1995			
		JP	8202410 A	09-08-1996			
		ZA	9504790 A	09-12-1996			