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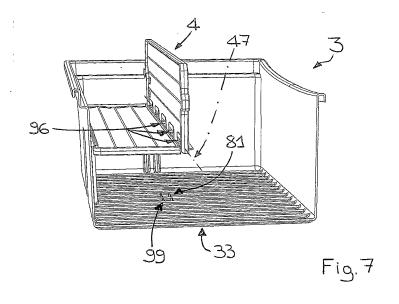
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(54) Refrigerator device with separator

- (57) A food refrigeration device comprising: -a refrigeration compartment (2);
- -a drawer (3) which is movable between a first position of maximum insertion in the compartment (2) and a second position of at least partial extraction from the compartment (2), said drawer comprising a bottom (33) and lateral delimiting means (34);
- -a separator (4) which splits said drawer (3) into at least a first and a second section (31, 32) intended to contain foods;
- -a first mouth (5) for injecting a flow of refrigerated fluid,

said first mouth (5) being located on a rear wall (22) of the compartment (2) and directing the flow of fluid towards said separator (4).

The separator (4) projects upwards relative to a rear wall (91) of the drawer (3), defining an obstacle that intercepts the flow of refrigerated fluid and directs it into the first section (31), said first mouth (5) being located at a greater height relative to said rear wall (91) of the drawer (3), said rear wall (91) of the drawer (3) being a part of said lateral delimiting means (34).





EUROPEAN SEARCH REPORT

Application Number

EP 13 19 8601

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		DOCUMENTS CONSIDERED TO BE REL			
	Categ	Citation of document with indic	ation, where appropri		
10	A	US 2009/230832 A1 (SH 17 September 2009 (20 * paragraph [0046] - figures 1,2,8, *	 JUNG-MIN		
15	A	EP 1 724 540 A2 (WHIF 22 November 2006 (200 * paragraph [0005] - figures 1-3 *	06-11-22)		
20	A	DE 10 2010 003829 A1 HAUSGERAETE [DE]) 13 October 2011 (2011 * the whole document	10-13)		
25	A	JP H03 91681 A (HITAC 17 April 1991 (1991-6 * abstract; figures 1)4-17) ´		
30	A	DE 20 2008 007361 U1 HAUSGERAETE [DE]) 31 July 2008 (2008-07 * the whole document	'-31)		
35	A	DE 10 2011 075099 A1 HAUSGERAETE [DE]) 8 November 2012 (2012 * abstract; figures 1	?-11-08)		
40	A	JP 2004 324940 A (HIT SOLUTIONS) 18 November * abstract; figures 1	er 2004 (2004-		
45					
	3	The present search report has bee	·		
50	(100)	Place of search Munich	Date of completion 16 May 2		
	32 (P04	CATEGORY OF CITED DOCUMENTS	T:t		
	1503 03.82 (P04C01)	particularly relevant if taken alone particularly relevant if combined with another	E:e a D:o		

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	DOCUMENTS CONSID	ERED TO BE RELEVANT			
ategory	Citation of document with ir of relevant passa	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
4	17 September 2009 (SHIN JUNG-MIN [KR]) 2009-09-17) - paragraph [0059];	1,10	INV. F25D25/02	
\	EP 1 724 540 A2 (WH 22 November 2006 (2 * paragraph [0005] figures 1-3 *	IRLPOOL CO [US]) 006-11-22) - paragraph [0015];	11		
\	DE 10 2010 003829 A HAUSGERAETE [DE]) 13 October 2011 (20 * the whole documen		1,10,11		
1	JP H03 91681 A (HIT 17 April 1991 (1991 * abstract; figures	-04-17)	1,10		
١	DE 20 2008 007361 U HAUSGERAETE [DE]) 31 July 2008 (2008- * the whole documen		11	TECHNICAL FIELDS SEARCHED (IPC)	
١	DE 10 2011 075099 A HAUSGERAETE [DE]) 8 November 2012 (20 * abstract; figures		11		
1	JP 2004 324940 A (H SOLUTIONS) 18 Novem * abstract; figures	ber 2004 (2004-11-18)	11		
	The present search report has l	peen drawn up for all claims			
	Place of search	Date of completion of the search		Examiner	
	Munich	16 May 2018	Jes	sen, Flemming	
CATEGORY OF CITED DOCUMENTS T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filling date Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filling date D: document cited in the application L: document cited for other reasons A: member of the same patent family, corresponding document					



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	CLAIMS INCURRING FEES
	The present European patent application comprised at the time of filing claims for which payment was due.
10	Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
15	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.
20	LACK OF UNITY OF INVENTION
	The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
25	
20	see sheet B
30	
	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
35	As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
40	Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
45	
	None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
50	
55	The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the
	claims (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION SHEET B

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5 The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely: 1. claims: 1-10 10 15 2. claims: 11-15 A food refrigeration device with a drawer having a separator comprising a panel and a flap hinged about a horizontal axis. 20 25 30 35 40 45 50 55

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-05-2018

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	US 2009230832 A1	17-09-2009	NONE	
15	EP 1724540 A2	22-11-2006	BR PI0601319 A EP 1724540 A2 US 2006250062 A1	19-12-2006 22-11-2006 09-11-2006
20	DE 102010003829 A1	13-10-2011	CN 102859301 A DE 102010003829 A1 EP 2556312 A2 PL 2556312 T3 WO 2011124449 A2	02-01-2013 13-10-2011 13-02-2013 31-10-2016 13-10-2011
	JP H0391681 A	17-04-1991	NONE	
25	DE 202008007361 U1	31-07-2008	NONE	
	DE 102011075099 A1	08-11-2012	NONE	
30	JP 2004324940 A	18-11-2004	NONE	
35				
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45				
50				
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82