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EUROPEAN PATENT APPLICATION

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Bulletin 85/17

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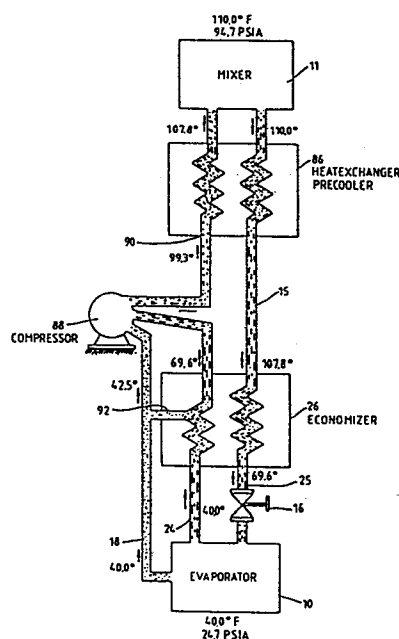
⑧④ Designated Contracting States: **AT BE CH DE FR GB IT LI LU NL SE**

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⑤④ **Chemically assisted mechanical refrigeration process.**

⑤⑦ There is provided a chemically assisted mechanical refrigeration process including the steps of: mechanically compressing a refrigerant stream which includes vaporized refrigerant; contacting the refrigerant with a solvent in a mixer (11) at a pressure sufficient to promote substantial dissolving of the refrigerant in the solvent in the mixer (11) to form a refrigerant-solvent solution while concurrently placing the solution in heat exchange relation with a working medium to transfer energy to the working medium, said refrigerant-solvent solution exhibiting a negative deviation from Raoult's Law; reducing the pressure over the refrigerant-solvent solution in an evaporator (10) to allow the refrigerant to vaporize and substantially separate from the solvent while concurrently placing the evolving refrigerant-solvent solution in heat exchange relation with a working medium to remove energy from the working medium to thereby form a refrigerant stream and a solvent stream; and passing the solvent and refrigerant stream from the evaporator.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	EP-A-0 021 205 (ENERGIAGAZDALKODASI INTEZET) * Page 3, line 1 - page 4, line 10; page 5, line 1 - page 10, line 24; figures 1-3 *	1,2,17 ,22	F 25 B 25/02
Y		3,4,7- 11	
A		12,15	
Y	--- US-A-2 182 453 (SELLEW) * Page 2, right-hand column, line 9 - page 7, right-hand column, line 48; figures 2-15 *	3,4,8- 11	
A		5	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
Y	--- DE-C- 953 378 (ALTENKIRCH) * Page 4, line 73 - page 5, line 41; figure 8 *	7	F 25 B
X	--- DE-A-2 801 529 (SCHÄFER) * Page 8, last paragraph - page 9, last paragraph; figure 2 *	1,2,6, 17,21	
A		8,15, 22	
	--- -/-		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-01-1986	Examiner BOETS A.F.J.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone 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 filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	US-A-1 675 455 (HAYNES) * Page 1, line 70 - page 3, line 108; figure *	1,8-10 ,14,15 ,17	
A		3,12, 22,23	
X	--- DE-A-3 100 019 (MALEWSKI) * Page 3, paragraph 1 - page 4, paragraph 2; figure *	1,2,17	
A		4,8,11 ,12,15 ,22,24	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	--- DE-A-2 850 403 (VEB KOMBINAT LUFT- UND KÄLTETECHNIK) * Page 4, paragraph 2 - page 7, paragraph 1; figure *	1,2,17 ,22,24	
A		4,8,11 ,12,15	
X	--- FR-A-2 308 885 (ZEILON) * Page 2; line 13 - page 11, line 28; figures 1,2 *	1,2,17	
	--- -/-		
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A	---	8, 9, 13 , 15, 16 , 22, 23													
X	DE-C- 593 548 (LINDSTRÖM) * Page 1, line 45 - page 2, line 75; figure *	1, 2, 17 , 21													
A	---	4, 6, 8, 11, 12, 15, 22													
A	US-E- 30 252 (LEONARD) * Column 2, line 49 - column 6, line 36; figure 1 *	19, 20													
A	DE-C- 485 656 (CHICAGO PNEUMATIC TOOL) ---														
A	DE-A-3 204 460 (BRAUKMANN KESSEL) ---														
A	EP-A-0 056 147 (MARKFORT) ---														
A	GB-A-2 044 907 (JOH. VAILLANT) --- -----														
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