1	CONSUMABLE PRODUCTS PRODUCED BY	616	Heat exchange with liquid cryogen
3.1	USING ELECTRICAL OR MAGNETIC	617	.Separation of gas mixture
3.1	EFFECT	618	Natural gas
3.2	.Thermoelectric; e.g., peltier effect	619	Compression, expansion, and condensation
3.3	Heat pump, selective heating	620	Distillation
	and cooling	621	$\ldots$ Flowline expansion engine
3.4	Including dehumidifying and	622	Downstream of column
	condensate handling	623	External refrigeration
3.5	Made with flexible heat		circuit
	exchanger material; e.g.,	624	Membrane
	blanket, wearing apparel, etc.	625	Liquid contact
3.6	Interior of enclosure cooled;	626	Solid sorption
	e.g., refrigerator	627	Dephlemation
3.61	Having vehicle feature; e.g.,	628	Automatic control
	cooling cart, car, truck,	629	Solidification
	boat, etc.	630	Plural columns
3.62	Portable, having transporting	631	Recycle
	feature; e.g., handle	632	Liquid contact
3.63	Icemaker	633	Dehydrating
3.64	Beverage dispenser	634	Expansion
3.7	Including specific circuitry or	635	Plural contact columns
	heat exchanger material	636	Sorption
4	CHEMICAL REACTION OR SOLIDS	637	Solidification
	DISSOLVING	638	Regenerating heat exchanger
5	VORTEX TUBE, E.G., RANQUE	639	Helium
6	GAS COMPRESSION, HEAT	640	Air
6	REGENERATION AND EXPANSION,	640 641	Air Regenerating heat exchanger
	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE		
7	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT	641	Regenerating heat exchanger
	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS	641 642	Regenerating heat exchangerFiltration
7 600	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE	641 642 643	<pre>Regenerating heat exchangerFiltrationDistillation</pre>
7 600 601	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .Solidification	641 642 643 644	<ul><li>Regenerating heat exchanger</li><li>Filtration</li><li>Distillation</li><li>Upstream operation</li></ul>
7 600 601 602	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxide	641 642 643 644 645	<pre>Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engine</pre>
7 600 601 602 603	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnow	641 642 643 644 645 646	<pre>Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial charging</pre>
7 600 601 602 603 604	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed block	641 642 643 644 645 646 647 648 649	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial charging
7 600 601 602 603 604 605	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE UTILIZING FUEL AS REFRIGERANT CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets	641 642 643 644 645 646 647 648 649 650	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogen
7 600 601 602 603 604 605 606	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE  .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .Liquefaction	641 642 643 644 645 646 647 648 649 650 651	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engine
7 600 601 602 603 604 605 606 607	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogen	641 642 643 644 645 646 647 648 649 650 651 652	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygen
7 600 601 602 603 604 605 606 607 608	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHelium	641 642 643 644 645 646 647 648 649 650 651 652 653	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pump
7 600 601 602 603 604 605 606 607 608 51.2	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effect	641 642 643 644 645 646 647 648 649 650 651 652 653 654	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenOxygenIquid oxygen
7 600 601 602 603 604 605 606 607 608	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHelium .Utilizing Joule-Thomson effectHe3/He4 dilution refrigerator	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembrane
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenLiquid oxygenMembraneAutomatic control
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gas	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHelium .Utilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control STORAGE OF SOLIDIFIED OR
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade refrigeration	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 45.1	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control STORAGE OF SOLIDIFIED OR LIQUIFIED GAS (E.G., CRYOGEN)
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade refrigerationCompression, expansion, and	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 45.1	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control STORAGE OF SOLIDIFIED OR LIQUIFIED GAS (E.G., CRYOGEN) .With sorbing or mixing
7 600 601 602 603 604 605 606 607 608 51.2 610 611 612	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade refrigerationCompression, expansion, and condensation	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 45.1	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control .Automatic control STORAGE OF SOLIDIFIED OR LIQUIFIED GAS (E.G., CRYOGEN) .With sorbing or mixing .Mixing of substance with
7 600 601 602 603 604 605 606 607 608 51.2 610	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHelium .Utilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade refrigerationCompression, expansion, and condensationHeat exchange with liquid	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 45.1	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingPlowline expansion engineFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control .Automatic control .TORAGE OF SOLIDIFIED OR LIQUIFIED GAS (E.G., CRYOGEN) .With sorbing or mixing .Mixing of substance with hydrogen
7 600 601 602 603 604 605 606 607 608 51.2 610 611 612	REGENERATION AND EXPANSION, E.G., STIRLING CYCLE  UTILIZING FUEL AS REFRIGERANT  CRYOGENIC TREATMENT OF GAS OR GAS MIXTURE .SolidificationCarbon dioxideSnowPressed blockExtruded pellets .LiquefactionHydrogenHeliumUtilizing Joule-Thomson effectHe3/He4 dilution refrigerator (i.e., superfluid)Natural gasMulticomponent cascade refrigerationCompression, expansion, and condensation	641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 45.1	Regenerating heat exchangerFiltrationDistillationUpstream operationFlowline expansion engineSpaced initial chargingSpaced initial chargingDownstream operationFlowline expansion engineHigh pressure nitrogenLow pressure nitrogenOxygenFlowline pumpLiquid oxygenMembraneAutomatic control .Automatic control .Automatic control STORAGE OF SOLIDIFIED OR LIQUIFIED GAS (E.G., CRYOGEN) .With sorbing or mixing .Mixing of substance with

47.1	.With conservation of cryogen by reduction of vapor to liquid	536	Refrigerant remains liquid during cooling
	within storage receptacle	537	Utilizing a constituent of the
48.1	.With vapor discharged from storage receptacle		original mixture or solution as refrigerant
48.2	And subsequently restored to	538	Solidifying or purifying in a
	receptacle as liquid		pulsed column or using sonic
48.3	And subsequently used to cool		vibration
1010	receptacle	539	With control of pulsed column
48.4	Discharge caused by ignition of	333	process parameter
40.4	combustible gas	540	With measured parameter
40 1	<u> </u>	340	
49.1	.With measuring	541	responsive control
49.2	Of liquid level	341	With separated constituent
50.1	Liquified gas transferred as	F 4.0	recycle
	liquid	542	Using melted solid to wash
50.2	With vaporizing of liquified		solidified constituent
	gas downstream of storage	543	With squeezing or compression
50.3	Energy converted to work		of solidified component
	(e.g., used to drive prime	544	With stirring, agitating or
	mover)		scraping of the solidification
50.4	Operates valve which controls		zone
	flow of liquid	545	With externally scraped drum
50.5	In phase separator		or helix or screw
50.6	Specific pump structure	59	.Accumulating holdover ice in
50.7	Specific conduit, valve, or		situ
	coupling structure	60	.Packaging
51.1	.Including cryostat	61	.Utilizing motion of vehicle
52.1	.Spraying of cryogen	62	Treating an article
53.1		63	Moving through cooling zone
	.Underground or underwater storage		during cooling
53.2	.Storage in modified vehicle	64	By contacting with liquid
	(e.g., ship, truck, etc.)	65	Diverse sequential
54.1	.Cryogen stored in both phases		temperatures, e.g., precooling
	(e.g., as slush or gel)	66	.Congealing flowable material,
54.2	.Controlled conversion of		e.g., ice making
	solidified gas to another	67	With filtering or gravitational
	phase		separating
54.3	.Storing solidified gas	68	Agitating
55.5	LOW PRESSURE COLD TRAP PROCESS	69	Introducing gas, e.g., air
	AND APPARATUS	70	By injecting
56	PROCESSES	71	Removing product from
57	.Suspending in upwardly directed		congealing surface
	current	72	Flexing supporting surface
532	.Fractionally solidifying a	73	By heating
332	constituent and separating the	74	Spraying or dripping
	same	75	Sequential stages, e.g.,
533	Including direct contact with	75	composite block making
333	added refrigerant	76	
534	Liquid refrigerant converted	76	.With preliminary refrigerant
J J 4	to vapor phase during cooling	77	manufacturing
525		77	Assembling, charging, or
535	Spent refrigerant vapor used		repairing of refrigeration
	in direct contact to melt	7.0	producer
	solidified component or heat	78	.Deodorizing, antisepticizing or
	product liquid		providing special atmosphere

79	.Exchanging heat between plural systems, e.g., disparate	110	With diffusion of refrigerant into inert gas
80	.Defrosting or frost inhibiting	111	With forced circulation
81	By utilizing working fluid of		between evaporator and sorber
-	refrigeration producer	112	Utilizing particular
82	By utilizing fluid strange to		refrigerant and/or sorbent
	system		materials
83	.Preventing slugging to	113	.Transferring heat between
	compressor		diverse function portions of
84	Lubricant handling		refrigeration cycle
85	.Separating or preventing	114	.Employing diverse materials or
03	formation of undesirables		particular material in
86	Reducing pressure on compressed		refrigeration circuit
	gas	115	.Compressing, condensing and
87	Converting energy of expansion		evaporating
0,	to mechanical movement	116	Utilizing motive energy of
88	With reheat of gas stream		fluid to compress
89	.Circulating external gas	117	Dividing refrigerant flow,
90	With reheating		e.g., bypass parallel units
91	With adding of moisture	118	.Pumping fluid in closed circuit
92	With adding of moisture	119	.Condensing and evaporating
93	With removing of moisture	120	.Spaced cooling steps
94	By sorption	121	.Gas and liquid contact
95	Plural cooling, e.g.,	122	.Combining fluids having diverse
93			temperatures
96	precooling by exhaust	123	SEPARATOR FOR SOLIDIFIED
90	Indirect cooling using closed circuit heat transfer fluid	123	CONSTITUENT OF LIQUID MIXTURE
0.5		101	<del>-</del>
		1 2.4	.With heater for liquid mixture
97	Combining streams having	124	.With heater for liquid mixture
	diverse temperatures		container
98	diverse temperatures .Fluid external of refrigeration	125	container WITH INDICATOR OR TESTER
98	diverse temperatures .Fluid external of refrigeration producing cycle		container WITH INDICATOR OR TESTER .Operatively correlated with
	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer	125 126	<pre>container WITH INDICATOR OR TESTER .Operatively correlated with   automatic control</pre>
98	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle	125	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or
98	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet	125 126 127	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers
98 99 100	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber	125 126	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation
98 99 100 101	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber  Evaporation induced by sorption	125 126 127 128	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost
98 99 100 101 102	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber  Evaporation induced by sorption  Using diverse refrigerants	125 126 127 128 129	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensing
98 99 100 101	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of	125 126 127 128 129 130	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material
98 99 100 101 102 103	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluid	125 126 127 128 129	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of
98 99 100 101 102	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or	125 126 127 128 129 130 131	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element
98 99 100 101 102 103 104	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or output	125 126 127 128 129 130 131	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL
98 99 100 101 102 103	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber  Evaporation induced by sorption  Using diverse refrigerants  With modulated flow rate of fluid  By varying heat input or output  Varying non-refrigerant fluid	125 126 127 128 129 130 131	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers  .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL .Responsive to vehicle body
98 99 100 101 102 103 104 105	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber  Evaporation induced by sorption  Using diverse refrigerants  With modulated flow rate of fluid  By varying heat input or output  Varying non-refrigerant fluid flow	125 126 127 128 129 130 131 132 133	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers  .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL .Responsive to vehicle body motion or traction
98 99 100 101 102 103 104	diverse temperatures  Fluid external of refrigeration producing cycle  Indirect by using heat transfer fluid external of cycle  Vacuumizing an open outlet chamber  Evaporation induced by sorption  Using diverse refrigerants  With modulated flow rate of fluid  By varying heat input or output  Varying non-refrigerant fluid flow  Intermittent operating of	125 126 127 128 129 130 131 132 133	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator
98 99 100 101 102 103 104 105 106	diverse temperatures  Fluid external of refrigeration producing cycle Indirect by using heat transfer fluid external of cycle  .Vacuumizing an open outlet chamber  .Evaporation induced by sorption Using diverse refrigerants With modulated flow rate of fluid By varying heat input or output Varying non-refrigerant fluid flow Intermittent operating of generation and sorption cycle	125 126 127 128 129 130 131 132 133	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product
98 99 100 101 102 103 104 105	diverse temperatures  Fluid external of refrigeration producing cycle Indirect by using heat transfer fluid external of cycle  .Vacuumizing an open outlet chamber  .Evaporation induced by sorption Using diverse refrigerants With modulated flow rate of fluid By varying heat input or output Varying non-refrigerant fluid flow Intermittent operating of generation and sorption cycle With absorption liquid	125 126 127 128 129 130 131 132 133 134 135	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product condition
98 99 100 101 102 103 104 105 106	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system	125 126 127 128 129 130 131 132 133	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control  .Diverse function indicators or testers  .Atmospheric condensation accumulation, e.g., frost  .Condition sensing  .External cooled material  .Position or extent of motion of movable element  AUTOMATIC CONTROL  .Responsive to vehicle body motion or traction  .Electrical generator  .By congealed removable product condition  .By change of consistency, e.g.,
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressure	125 126 127 128 129 130 131 132 133 134 135	container WITH INDICATOR OR TESTER .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product conditionBy change of consistency, e.g., viscosity or overrun
98 99 100 101 102 103 104 105 106	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressureWith liquid refrigerant	125 126 127 128 129 130 131 132 133 134 135 136	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers  .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL  .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product condition  .By change of consistency, e.g., viscosity or overrunBy accumulation of product
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycleIndirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressureWith liquid refrigerant transfer to evaporator against	125 126 127 128 129 130 131 132 133 134 135 136	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers  .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL  .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product condition  .By change of consistency, e.g., viscosity or overrun .By accumulation of productOn heat absorber
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycle .Indirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorption .Using diverse refrigerants .With modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flow .Intermittent operating of generation and sorption cycle .With absorption liquid circulation aided by system generated pressure .With liquid refrigerant transfer to evaporator against gravity	125 126 127 128 129 130 131 132 133 134 135 136	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product conditionBy change of consistency, e.g., viscosity or overrunBy accumulation of productOn heat absorber .By accumulation on freezing
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycle .Indirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressureWith liquid refrigerant transfer to evaporation of	125 126 127 128 129 130 131 132 133 134 135 136 137 138 139	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product conditionBy change of consistency, e.g., viscosity or overrunBy accumulation of productOn heat absorber .By accumulation on freezing surface, e.g., ice
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycle .Indirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressureWith liquid refrigerant transfer to evaporator against gravityCooling by evaporation of refrigerant from sorption	125 126 127 128 129 130 131 132 133 134 135 136	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element  AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product conditionBy change of consistency, e.g., viscosity or overrunBy accumulation of productOn heat absorber .By accumulation on freezing surface, e.g., iceBy frost, i.e., atmospheric
98 99 100 101 102 103 104 105 106 107	diverse temperatures .Fluid external of refrigeration producing cycle .Indirect by using heat transfer fluid external of cycle .Vacuumizing an open outlet chamber .Evaporation induced by sorptionUsing diverse refrigerantsWith modulated flow rate of fluidBy varying heat input or outputVarying non-refrigerant fluid flowIntermittent operating of generation and sorption cycleWith absorption liquid circulation aided by system generated pressureWith liquid refrigerant transfer to evaporation of	125 126 127 128 129 130 131 132 133 134 135 136 137 138 139	container  WITH INDICATOR OR TESTER  .Operatively correlated with automatic control .Diverse function indicators or testers .Atmospheric condensation accumulation, e.g., frost .Condition sensingExternal cooled material .Position or extent of motion of movable element AUTOMATIC CONTROL .Responsive to vehicle body motion or tractionElectrical generator .By congealed removable product conditionBy change of consistency, e.g., viscosity or overrunBy accumulation of productOn heat absorber .By accumulation on freezing surface, e.g., ice

142	Discontinuous operation of	174	.Trapping and discharging
	refrigerant or sorbent	4.5.5	refrigerant batches
1.40	container unit	175	.Diverse, cascade or compound
143	Of intermittent generator-	156 1	refrigeration-producing system
1 4 4	sorber unit	176.1	.Humidity sensor
144	Plural unit sequence or alternation	176.2	Having defrost control related to humidity
145	Serially connected type	176.3	Controlling variable compressor
146	Of cooling fluid		capacity
147	Including sorbent refrigerant flow	176.4	Controlling gas-liguid contactor for air
148	Of heating means	176.5	Control of air heater, e.g.,
149	.Withdrawing or adding		reheat pump
	refrigerant from or to	176.6	Plus air temperature sensor
	normally closed system		exerting a control
150	.Preventing, removing or handling	177	.Of external fluid or means
	atmospheric condensate	178	Diverse control or response
151	Defrosting	179	Plural external fluids or
152	Limited area, e.g., preferred		means controlled
	zone	180	External fluid and
153	By storage compartment closure	100	refrigeration producer
	actuated means	181	Condenser cooling fluid flow
154	By energy input actuated means	182	Sequential
155	Including time or program	183	Cooling fluid for heat
200	actuator	103	rejecter, e.g., condenser
156	By temperature	184	By refrigerant
157	.Time or program actuator	185	Indirect heat transfer liquid,
158	Time delay of condition sensing	103	e.g., brine
100	or control operation	186	Air controller or director
159	.Selective heating or cooling	187	Damper between storage
160	Reversible cycle machine	107	compartments
161	.With correlated manual or	188	By lever, e.g., float-
101	external operator and	100	controlled valve
	condition sensing means, e.g.,	189	By fluid flow, e.g., check
	cutoff or reset	103	valve
162	Manual initiate with sensor	190	.Refrigeration producer
-	terminate	191	Of or by jet-type compressor
163	Selective	192	Lubrication
164	Manual reset or sensor operates	193	Of or by compressor
101	additional element	194	Lubricant aspirator in
165	.Solidified gas	194	evaporator liquid level
166	Diverse control or response		control chamber
167	Of heater, heat transmitter or	195	Impurity removal
10.	secondary fluid	196.1	
168	By temperature	190.1	Bypass, e.g., compressor unloading
169	.Vacuumized chamber with open	196.2	For plural compressor
	outlet		cylinders
170	Evacuating means, e.g., jet	196.3	Direct bypass of compressor
171	pump	196.4	Condensor bypass
171	.Gas-liquid contact cooler, fluid	197	Of expansion zone
170	flow	198	Of serially arranged
172	.Air compessor, cooler and		evaporator
177	expander	199	Through an evaporator, i.e.,
173	.Of external fluid reheating		parallel

200	Individual flow controllers and sensors	228.4	By variable speed motor or pulley type mechanism
201	By external cooled liquid or holdover	228.5	By variable compressor output, e.g., unloading, staging, etc.
202	Including external thermal source modifying sensor action	229 230	By external cooled gasBy condition of power source
203	Plural refrigerating producing	231	TIME OR PROGRAM ACTUATOR
204	elements and plural sensorsIncluding expansion valve or	232 233	.Closed system sorbent type .Congelation product maker
205	variable restrictorPlural variable restrictors	234 235	.Defrosting RINK
200	in flow line	235.1	UTILIZING SOLAR ENERGY
206	High and low side	236	WITH ALTERNATELY USABLE ENERGY
207	Diverse function refrigeration	230	SOURCES
	elements controlled by single	237	SEPARABLE AMBULANT COOLED
	sensor		ENCLOSURE AND POWER OR COOLING
208	Single refrigeration producer		SOURCE
	controlled by plural sensors	238.1	DISPARATE APPARATUS UTILIZED AS
209	Compensating or modifying		HEAT SOURCE OR ABSORBER
210	Expansion valve or variable	238.2	.With vortex tube,
044	restrictor		thermoelectric, Stirling or
211	External condition sensor	020 2	air cycle
212	Plural sensors at low side	238.3	.With sorption
213	Alternative or selective sensors	238.4	.With power vapor generator
214	0 0 0 0 - 0	238.5	.With distillation, ice maker, or
214	Single sensor mounted or formed to respond to plural	238.6	freeze separation
	conditions, e.g., compensators	238.7	.With vapor compression systemReversible, i.e., heat pump
215	Controlling compressor or its	230.7	WITH VEHICLE FEATURE
213	drive, e.g., torque or speed	240	.Ship
216	Of or by evaporation zone	240	.Utilizing motion of vehicle
217	Back flow or pressure	242	Axle drive
	regulator	243	.Vehicle contained common power
218	Valve or restrictor by liquid	210	supply
0.4.0	lever	244	.Occupant-type vehicle
219	Low side float	245	.Melt control
220	Float chamber at suction	246	DISPLAY TYPE
221	lineValve isolated from float chamber	247	.With means dispersing or evaporating liquid into atmosphere
222	Of expansion valve or variable restrictor	248	.Means removing or preventing condensate on transparent
223	By external condition		panel
224	By condition at low side	249	.With feature extraneous to
225	At or beyond evaporator		cabinet or cooler
	outlet, i.e., superheat	250	.With material conveyer or
226	Compressor or its drive controlled		transporter, e.g., for ice or goods
227	By conducted evaporator	251	.Stepped, e.g., shelves
	temperature	252	.Plural storage compartments
228.1	Compressor or its drive controlled	253	Formed by hollow imperforate cooled partition
228.2	For ice or ice cream maker	254	Including nondisplay storage
228.3	By refrigerant pressure		compartment

255			
	.With air controlling or directing means	281	.With porous or foraminous atmospheric condensate
256	Spaced elongated air inlet and outlet type, e.g., air curtain	282	receiver .Means contacting heat absorber
257	.Bottom cooling means, e.g.,	202	with fluid strange to system
231	cooled floor	283	.Moisture condensing means
258	WITH MEANS FORMING NON-COOLED	200	distinct from principal heat
200	WORK SURFACE, E.G., COUNTER,		absorber
	TABLE, SIDEBOARD	284	.Wiper or scraper
259.1	STRUCTURAL INSTALLATION	285	.Retainer or flow director for
259.2	.With electrical component		atmospheric condensate
	cooling	286	Adjustable position or
259.3	.With body applicator		selectively usable
259.4	.With evaporative type cooler	287	Wetted inner surface type
260	.Geographic, e.g., subterranean		refrigerator
	feature	288	With flow director directing
261	.Article of furniture, e.g., bed		condensate to retainer
	cover or canopy	289	Retainer exterior of
262	.Window connected or mounted		refrigerated space
263	.Vertical partition or wall	290	Plural distinct flow directors
	mounting feature	0.04	acting in parallel
264	WITH ILLUMINATING OR RADIANT	291	Condensate retainer
0.65	ENERGY MEANS	292	WITH MEANS FOR CHARGING CLOSED
265	COMPARTMENT ACCESS OR USE AND AIR	202	REFRIGERATION PRODUCING SYSTEM
266	BLOCKING	293 294	HAND MANIPULABLE TOOL
266	.Including article conveyer or	294	CONTAINER CUTTER OR PUNCH-TYPE OPENING MEANS
267	transporter	295	RESILIENTLY SUPPORTED POWER AND/
207	INTERLOCKED DIVERSE FUNCTION ELEMENTS	293	OR HEAT REJECTING ELEMENT
268	VACUUMIZED CHAMBER WITH OPEN	296	MUFFLER OR SOUND DAMPENER
200	VAPOR OR GAS OUTLET	297	EXTERNAL SUPPORT FOR REFRIGERATOR
		25,	HOUSING
269	.including sorbent agent		
269 270	.Including sorbent agent .Svstem, i.e., multiple treating	298	WITH REPAIR, ASSEMBLY OR
269 270	. System, i.e., multiple treating or fluid handling means	298	WITH REPAIR, ASSEMBLY OR DISASSEMBLY MEANS
	.System, i.e., multiple treating	298 299	-
270	System, i.e., multiple treating or fluid handling means		DISASSEMBLY MEANS
270	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING	299	DISASSEMBLY MEANS .Detachable valve and coupling
<ul><li>270</li><li>271</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE	299	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from
<ul><li>270</li><li>271</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING	299 300	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from support
<ul><li>270</li><li>271</li></ul>	.System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER .Operating on insulation, e.g.,	299 300 301	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from supportWith grid or cube release means
<ul><li>270</li><li>271</li><li>272</li></ul>	.System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  .Operating on insulation, e.g., vent to refrigerated	299 300 301 302 303	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from supportWith grid or cube release means .Sliding or rolling on guide
<ul><li>270</li><li>271</li><li>272</li><li>273</li></ul>	.System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  .Operating on insulation, e.g., vent to refrigerated compartment	299 300 301 302	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from   supportWith grid or cube release means .Sliding or rolling on guide   means
<ul><li>270</li><li>271</li><li>272</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to	299 300 301 302 303 304	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from   supportWith grid or cube release means .Sliding or rolling on guide   means WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING   GAS-LIQUID CONTACTOR
<ul><li>270</li><li>271</li><li>272</li><li>273</li><li>274</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space	299 300 301 302 303	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from supportWith grid or cube release means .Sliding or rolling on guide means WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING GAS-LIQUID CONTACTOR .Cooling heat rejector of
<ul><li>270</li><li>271</li><li>272</li><li>273</li><li>274</li><li>275</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  .By external heater	299 300 301 302 303 304 305	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from   supportWith grid or cube release means .Sliding or rolling on guide   means WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING   GAS-LIQUID CONTACTOR .Cooling heat rejector of   refrigeration producer
<ul><li>270</li><li>271</li><li>272</li><li>273</li><li>274</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  . Heating principal heat	299 300 301 302 303 304	DISASSEMBLY MEANS .Detachable valve and coupling .Means releasing mold from   supportWith grid or cube release means .Sliding or rolling on guide   means WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING   GAS-LIQUID CONTACTOR .Cooling heat rejector of   refrigeration producer .Means feeding gas into
270 271 272 273 274 275 276	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  .Heating principal heat absorber, e.g., evaporator	299 300 301 302 303 304 305 306	DISASSEMBLY MEANS  .Detachable valve and coupling .Means releasing mold from   support With grid or cube release means .Sliding or rolling on guide   means  WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING   GAS-LIQUID CONTACTOR  .Cooling heat rejector of   refrigeration producer .Means feeding gas into   pressurized receiver
<ul><li>270</li><li>271</li><li>272</li><li>273</li><li>274</li><li>275</li></ul>	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  .Heating principal heat absorber, e.g., evaporator  .Means utilizing heat developed	299 300 301 302 303 304 305 306 307	DISASSEMBLY MEANS  Detachable valve and coupling  Means releasing mold from support  With grid or cube release means  Sliding or rolling on guide means  WITH CLEANING MEANS FOR APPARATUS  MATERIAL COOLING MEANS INCLUDING  GAS-LIQUID CONTACTOR  Cooling heat rejector of refrigeration producer  Means feeding gas into pressurized receiver  Submerged gas inlet
270 271 272 273 274 275 276 277	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  .Heating principal heat absorber, e.g., evaporator  Means utilizing heat developed by refrigeration producer	299 300 301 302 303 304 305 306 307 308	DISASSEMBLY MEANS  .Detachable valve and coupling .Means releasing mold from   support With grid or cube release means .Sliding or rolling on guide   means  WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING   GAS-LIQUID CONTACTOR .Cooling heat rejector of   refrigeration producer .Means feeding gas into   pressurized receiver .Submerged gas inletDrop tube type
270 271 272 273 274 275 276 277 278	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  .Heating principal heat absorber, e.g., evaporator  Means utilizing heat developed by refrigeration producer  .Bypassing or reversing internal fluid flow	299 300 301 302 303 304 305 306 307 308 309	DISASSEMBLY MEANS  Detachable valve and coupling  Means releasing mold from support  With grid or cube release means  Sliding or rolling on guide means  WITH CLEANING MEANS FOR APPARATUS  MATERIAL COOLING MEANS INCLUDING  GAS-LIQUID CONTACTOR  Cooling heat rejector of refrigeration producer  Means feeding gas into pressurized receiver  Submerged gas inlet
270 271 272 273 274 275 276 277	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  Heating principal heat absorber, e.g., evaporator  Means utilizing heat developed by refrigeration producer  Bypassing or reversing internal fluid flow  Means conducting atmospheric	299 300 301 302 303 304 305 306 307 308 309 310	DISASSEMBLY MEANS  .Detachable valve and coupling .Means releasing mold from    support  .With grid or cube release means .Sliding or rolling on guide    means  WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING    GAS-LIQUID CONTACTOR .Cooling heat rejector of    refrigeration producer .Means feeding gas into    pressurized receiver .Submerged gas inletDrop tube type .Gas recirculated relative to    enclosure .Fluid recirculating means
270 271 272 273 274 275 276 277 278 279	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  .Heating principal heat absorber, e.g., evaporator  Means utilizing heat developed by refrigeration producer  .Bypassing or reversing internal fluid flow  .Means conducting atmospheric condensate to heat rejecter	299 300 301 302 303 304 305 306 307 308 309 310 311	DISASSEMBLY MEANS  . Detachable valve and coupling . Means releasing mold from    support  . With grid or cube release means . Sliding or rolling on guide    means  WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING    GAS-LIQUID CONTACTOR  . Cooling heat rejector of    refrigeration producer . Means feeding gas into    pressurized receiver . Submerged gas inlet . Drop tube type . Gas recirculated relative to    enclosure . Fluid recirculating means . Diverse treating means
270 271 272 273 274 275 276 277 278	System, i.e., multiple treating or fluid handling means  ATMOSPHERE AND SORBENT CONTACTING TYPE  WITH MEANS PREVENTING OR HANDLING ATMOSPHERIC CONDENSATE RELATIVE TO HEAT ABSORBER  Operating on insulation, e.g., vent to refrigerated compartment  With means to add moisture to cooled space  By external heater  Heating principal heat absorber, e.g., evaporator  Means utilizing heat developed by refrigeration producer  Bypassing or reversing internal fluid flow  Means conducting atmospheric	299 300 301 302 303 304 305 306 307 308 309 310	DISASSEMBLY MEANS  .Detachable valve and coupling .Means releasing mold from    support  .With grid or cube release means .Sliding or rolling on guide    means  WITH CLEANING MEANS FOR APPARATUS MATERIAL COOLING MEANS INCLUDING    GAS-LIQUID CONTACTOR .Cooling heat rejector of    refrigeration producer .Means feeding gas into    pressurized receiver .Submerged gas inletDrop tube type .Gas recirculated relative to    enclosure .Fluid recirculating means

313	Elongated vertical passage for melt and air	336	MATERIAL HANDLERS OF DIVERSE TYPES
314	.With gas forcing or directing	337	COOLED ARTICLE STORAGE
	means		COMPARTMENT AND COOLED
315	.Porous wall liquid container or		ISOLATED MATERIAL HANDLER
	flow line	338	.Liquid container or flow line
316	.Porous cover member		within cooled enclosure
317	WITH SEPARATOR-CLARIFIER FOR	339	Including inlet flow line
	COOLED FLUID OR ICE-MELT		connection
318	.For liquid	340	MEANS PRODUCING SHAPED OR
319	Isolated from coolant		MODIFIED CONGEALED PRODUCT
320	WITH COMMINUTOR OR CUTTER	341	.With article press means
321	.Including means utilizing	342	.With means for working
021	product		congealing material, e.g.,
322	DISPARATE SERIALLY ARRANGED		beater
022	PRODUCT TREATING APPARATUS	343	Diverse blades
323.1	WITH INTERNAL-COMBUSTION ENGINE	344	.With product receiving and
323.2	.With cooling apparatus other		storing means
525.2	than gas compressor	345	.Freezing surface mounted for
323.3	.With electrical motor drive		movement during freezing
323.4	.With clutch or variable speed	346	Drum
J2J.4	transmission controlling	347	.With raw material projector,
	compressor drive	0 1 /	e.g., spray
324.1	REVERSIBLE, I.E., HEAT PUMP	348	.With means to precool or
324.2	.With cooling apparatus other	0.10	recirculate raw material
J24.2	than gas compressor	349	.Thawing means
324.3	.With product treatment	350	Attached to hand-manipulable
324.3	.With refrigerant collection and	330	mold
324.4	intermittent discharge	351	Electrical heater
324.5	3	352	Means using refrigerant or
324.3	.With atmospheric condensate	332	coolant as heating fluid
324.6	removal or prevention .With flow control or compressor	353	.Heat absorber with product
324.0	details	333	remover
205	External fluid flow reversed	354	Moving scraper
325	CONVERTIBLE	356	.Moving scraper  .Mold with means to absorb heat,
326	· · · · · · · · · · · · · · · · · · ·	330	
327	.Storable or variable capacity	371	e.g., brine tank  PORTABLE, COMMODITY-CONTAINING
200	ice bunker	371	
328	Bunker wall movable to chamber	3/2	.Mutually supported commodity and
200	wall	272	solid coolant
329	.Movable partition within cooled	373	LIQUID CONTACTING DISCRETE
220	compartment	274	COMMODITY
330	WITH REFRIGERANT OR COOLANT	374	.With article conveyer or
004	MANUFACTURING MEANS	275	transporter
331	COMBINED	375	With liquid recirculating means
332	DIVERSE SYSTEMS, E.G., ICE AND	376	.With liquid recirculating means
	MECHANICAL	377	ARTICLE HOLDER MOUNTED ON DOOR OR
333	.Primary and secondary dependent		PIVOTED PARTITION
	circuits	378	ARTICLE MOVING MEANS
334	Secondary evaporator contacting	379	.Solid refrigerant
	inner liner, e.g., two zone	380	.Continuous longitudinal-type
	cold wall		conveyor
335	PLURAL PAIRED DIFFERENT FUNCTION	381	.Rotary about fixed axis, e.g.,
	REFRIGERATION PRODUCING		rotary shelf or scraper
	ELEMENTS, E.G., CASCADE	382	.Drawer, tray or track-guided
			type; horizontally movable

383	MOVABLE THERMAL MEANS VARYING HEAT TRANSMISSION	411	With additional means causing flow, e.g., blower
384	COOLER UTILIZING SOLIDIFIED GAS	412	Inlet and outlet ports
385	.Sublimed gas entering insulation or within hollow wall	413	Means verging gas streams within storage space
386	.Means cooling withdrawable	414	Gas flow forcing means
	liquid	415	Space cooler units in separate
387	.External as circulator or		streams
	director	416	Above storage space and
388	.Means dispersing sublimed gas		adjacent opposed walls
	into cooled enclosure	417	With imperforate partition
389	WITHDRAWABLE LIQUID, E.G.,		forming storage compartments
	DISPENSER	418	Foraminous gas distributor flow
390	.With plural liquid outlets or		connected to cooler unit
	sources, e.g., distributing	419	Gas forcing means
	system	420	Directed relative to ice
391	.With withdrawn liquid receiver		container
392	.With agitator for withdrawable liquid	421	Foraminous wall or bottom ice container
393	.With intermediate indirect heat transfer fluid container or	422	Melt collector over storage space
	conductor	423	Storage space along
394	.Refrigerant evaporator		container side
	surrounding or within a	424	Gas flow passage means under
	container		ice container
395	Between cooled liquid container and insulation	425	.Gas flow through ice compartment contacting ice
396	.In indirect heat exchanging	426	.Gas forcing means, e.g., cooler
	relationship to coolant		unit
397	Barometric feed-type liquid	427	Plural gas inlets, e.g.,
200	container		recirculated and fresh air
398	Cooled liquid container supporting ice	428	Means directing gas over heat rejector
399	Helical or spiral coil	429	Unitarily driven plural
400	Ice holder and cooled liquid		blowers
	container concentrically	430	INTERMEDIATE FLUID CONTAINER
401	nested		TRANSFERRING HEAT TO HEAT
401	AIR COMPRESSOR, COOLER AND EXPANDER TYPE	404	ABSORBER OR HOLDOVER
402	.Motor-type expander	431	.Side-by-side or superimposed
402	Reciprocating element-type	420	cooled compartments
403	motor, e.g., piston	432	Different temperature
404	GAS CONTROLLER OR DIRECTOR	433	arrangementsWith top access to each
405	.Isolated gas compartment, e.g.,	433	compartment, e.g., ice cream
403	cold air jacket		cans
406	.Gas passage over or through	434	.Flow line connected transfer
	indirect heat-transfer container or holdover	131	fluid supply and heat exchanger
407	.Cooled gas directed relative to	435	.With indirect fluid pump or
40 <i>1</i>	cooled enclosure	±00	agitator
408	With adjustable gas flow	436	.Connected distinct sections for
200	controller	±30	indirect fluid
409	For exterior port	437	.Non-liquid heat accumulator
410	Exterior port, i.e.,	438	Forming cooled storage
3	ventilating	200	compartment

439	.Unitary jacket surrounding	467	REFRIGERATION PRODUCER
	coolant line	468	.With lubricant handling means
440	COOLED ENCLOSURE	469	Of unitary motor-compressor in
441	.Plural cooled compartments		casing
442	Coolers in parallel for plural	470	Lubricant separator
	compartments	471	At evaporator or evaporator-
443	Cooler integral with or forming		discharge line
	dividing wall	472	With lubricant heating means
444	Exterior wall	473	At condenser or receiver
445	With non-dividing cooler	474	.With refrigerant treater
446	Forms plural sides of a	475	Means for discharging impurity
4.45	storage compartment	45.6	from system
447	Insulating dividing wall	476	.Sorbent type
448	.Movable unit of refrigeration	477	Absorber-still, e.g.,
4.4.0	producing assembly	450	intermittent
449	Unit includes movable wall	478	Evaporator-condenser unit
450	section, e.g., door	479	With means returning sorbent
450	Unit includes condenser fan	400	from evaporator
451	.Flowing coolant container	480	With solid sorbent
	covered by insulation means or within hollow wall of	481	With sorber-generator cooling means
	enclosure	482	Internal liquid flow to
452	.With heat rejecting element		external cooler
452	enclosure or cooling feature	483	Pump means forcing gas or vapor
453	Heat rejector contacting		relative to sorber
4 - 4	enclosure wall	484	Vapor-liquid contact in
454	With ventilation means therefor		reabsorber forming liquid
455 456	Forced circulation	405	refrigerant
436	Vertical flue venting bottom	485	Means causing cooling fluid
457.1	compartment .Portable receptacle		contact with sorber and/or condenser
457.1	With holdover material	486	Means cooling liquid
457.3	Drinking container	400	refrigerant flow line to
457.4	For beverage receptacle		evaporator
457.5	For multiple receptacles	487	Internally generated pressure
457.6	Cooled serving dish	107	or capillary means moving
457.7	Picnic/lunch box type cooler		sorption liquor
457.8	Wine server/cooler	488	Transfer vessel, e.g., liquid
457.9	Cooled by means other than ice		trap
437.9	(e.g., mechanical, electrical,	489	Means attempering flow line
	absorption, cryogenic, etc.)		between sorber and generator
458	.Access surface open to	490	Inert gas
	atmosphere	491	Gas-liquid contactor within
459	.Ice support, e.g., container		inert gas circuit
460	Flowing ice melt heat exchanger	492	In evaporator
	within cooled enclosure	493	Means cooling inert gas flow
461	Lateral ice melt distributor		line from sorber to evaporator
462	Valve or trap within ice melt	494	Particular gas-liquid contact
	flow line		in sorber
463	Partially surrounding storage	495	Sorbent vapor separator between
	compartment		generator and condenser
464	Top access to ice compartment	496	Submerged gas-liquid contact
465	.With particular internal element		means
	support	497	With means to enhance
466	Resilient		separations in generator

498	.Compressor-condenser-evaporator circuit	CROSS-1	REFERENCE ART COLLECTIONS
499	Unitarily movable connected		
	units	900	TRIPLE COLUMN
500	Jet powered by circuit fluid	901	SINGLE COLUMN
501	External fluid actuates	902	APPARATUS
	compressor and exchanges heat	903	.Heat exchange structure
502	Diverse fluids	904	Coiled heat exchanger
503	With liquid trap or disperser	905	.Column
	in suction line	906	Packing
504	Means to apportion refrigerant	907	Insulation
	to evaporator	908	.Filter or absorber
505	Cooling motor and/or compressor	909	.Regeneration
	by refrigerant	910	.Expander
506	External cooling fluid contacts	911	.Portable
	heat rejector	912	EXTERNAL REFRIGERATION SYSTEM
507	Air cooled	913	.Liquified gas
508	Motor-compressor in common	914	MAGNETIC OR ELECTRIC FIELD
	housing	915	COMBUSTION
509	Condensed liquid receiver,	916	EXPLOSION REDUCTION
	e.g., surge tank	917	MERCURY
510	Plural compressors or multiple	918	HALOCARBON
	effect compression	919	ISOTOPE
511	Fixed restrictor	920	CARBON MONOXIDE
512	.Distinct vapor liquid separator	921	CHLORINE
	and separated liquid recycle	922	SULFUR
513	.Heat exchange between diverse	923	INERT GAS
	function elements	924	.Argon
515	.Evaporator, e.g., heat exchanger	925	.Xenon or krypton
516	Enclosure forming	926	GASOLINE
517	With closure	927	NATURAL GAS FROM NITROGEN
518	Surrounds inner container	928	RECOVERY OF CARBON DIOXIDE
519	Plural distinct sections or	929	.From natural gas
	diverse zones	930	.From nitrogen
520	Shelf is evaporator	931	RECOVERY OF HYDROGEN
521	Shelf, shelf or receptacle	932	.From natural gas
	support	933	.From helium
522	Integral or attached shelf	934	.From nitrogen
523	Corrugated or embossed wall	935	OLEFIN
524	Plural distinct sections	936	ERICKSON
525	With particular flow	937	CHENG
	distributor to sections	938	MEHRA
526	Serially connected	939	PARTIAL FEED STREAM EXPANSION
527	Flow controller or boiling	232	(AIR)
	expeditor	940	.High pressure column
528	Adjustable controller	J = 0	·gir probbate corumi
529	REFRIGERANT OR COOLANT, STORER OR		
	HANDLER		
530	.Envelope type	<b>₽</b> ∩₽₽₹^¹	N ART COLLECTIONS
531	MISCELLANEOUS	LOVETG	MAL CONDUCTIONS

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

## DIGESTS

DIG	1	RADIANT COOLING
DIG	2	REFRIGERANT PUMPS
DIG	5	AIRCRAFT COOLING
DIG	7	VACUUM PLATES
DIG	10	TOOL COOLING
DIG	11	HYDRATOR RECEPTACLES
DIG	13	INSULATION
DIG	16	ROOF AND CEILING LOCATED COOLERS
DIG	17	CONDENSER PRESSURE CONTROL
DIG	19	IONIC THOMPSON EFFECT
DIG	20	MATERIALS USED TO PREVENT
		CORROSION IN REFRIGERATION
		SYSTEM
DIG	21	EVAPORATORS WHERE REFRIGERANT
		COVERS HEAT EXCHANGE COIL
DIG	22	FREE COOLING
DTC	23	EXDINGTUR DIGROT