

Title (en)
THERMAL INTER-COOLER.

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Abstract (en)
[origin: WO9306422A1] The invention comprises a non-restrictive, constant pressure refrigerant recycling and cooling unit that interrupts the normal refrigerant cycle to permit a lower temperature liquid to enter the expansion device (5), and thus provide a lower temperature, and therefore a lower pressure gas for delivery to the inlet side of the compressor (9), which acts to reduce the energy requirement and cost to operate the compressor (9). This reduction in pressure and temperature also results in lower operating costs and lower maintenance costs and utilizes less refrigerant quantity requirements.

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F25B 40/00 (2006.01)

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Citation (search report)
• [A] US 2520045 A 19500822 - MCGRATH WILLIAM L
• [A] US 4373346 A 19830215 - HEBERT THOMAS H [US], et al
• [A] US 3922880 A 19751202 - MORRIS HERMAN H
• [A] DE 480869 C 19290809 - SUERTH MASCHF, et al
• [A] US 3822567 A 19740709 - KASAHARA K
• [A] US 2819592 A 19580114 - SMITH STERLING F
• See references of WO 9306422A1

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