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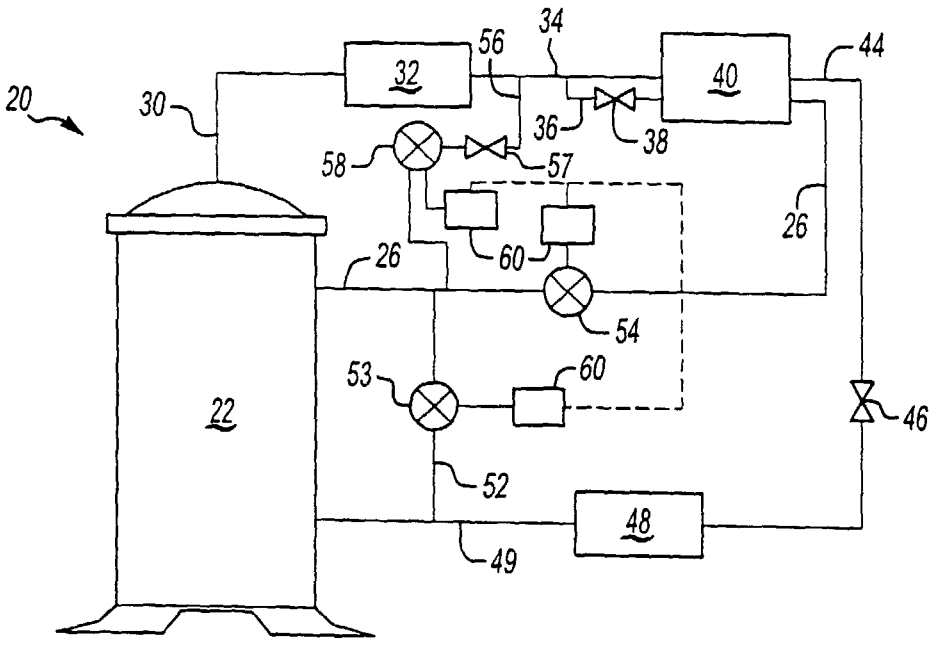
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(54) Title: INJECTION OF LIQUID AND VAPOR REFRIGERANT THROUGH ECONOMIZER PORTS



(57) Abstract: An improved apparatus and method for injecting a liquid/vapor into compression chambers at an intermediate pressure utilizes the economizer injection ports already found in the compressor. By selectively communicating a liquid to be injected into the compression chambers to the economizer return line, the economizer return line and its ports are utilized for this liquid/vapor injection. In this way, additional flow connections at the compressor are necessary. Moreover, by injecting the liquid at an intermediate pressure point, the other benefits are provided. In general, the liquid is injected to reduce the discharge temperature of the refrigerant under certain operational conditions.

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