

Hydrocarbon Gas Separation Process

Summary

An improved process for light hydrocarbon gas separation has been designed in order to create new process benefits.

Overview

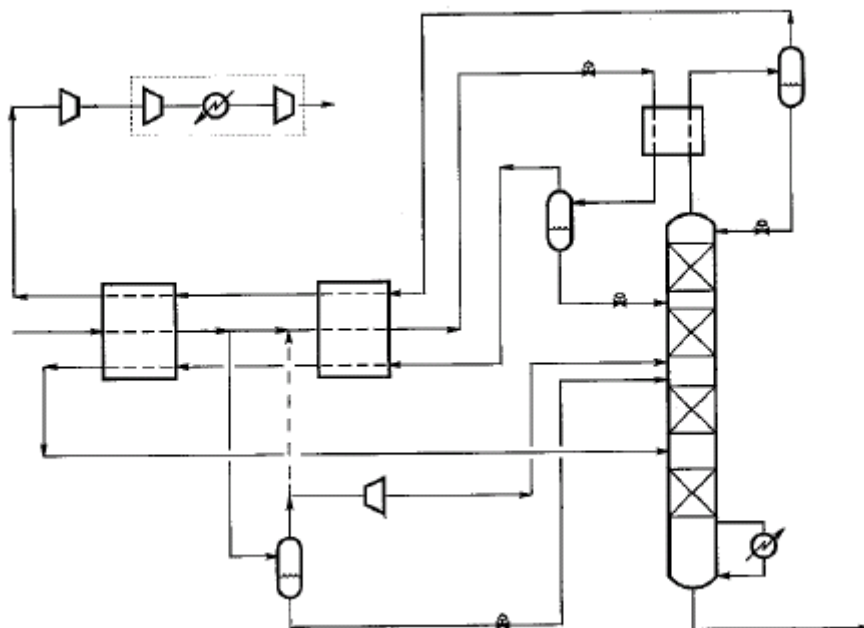
Air Products is offering for license a patent that details the enhanced hydrocarbon gas separation process. The separation of hydrocarbon gas mixtures is a common and energy-intensive process in the petroleum refining, natural gas, and petrochemical industries. The process is used when separating a pressurized hydrocarbon mixture with two volatile components. One of these components must be more volatile than the other. The Hydrocarbon Gas Separation Process is used for 95+% propane recoveries with full ethane rejection. Another part of the invention allows for high ethylene recovery with full methane rejection. The Hydrocarbon Gas Separation Process is designed to reduce the vapor load of the rectification section of the distillation column, which allows the column to operate at a higher pressure, decreasing the total power requirements. Operating at elevated pressure allows for a simpler, single column process, which reduces the distillation column diameter requirements, creating capital and operational cost savings.

Benefits:

- Allows column to operate at higher pressure
- Decreases total power requirements
- Allows for a simpler, single column process
- Reduces distillation column diameter requirements
- Creates capital and operational cost savings
- Decreases reflux requirement in distillation column.

| Priority Patent Number | Title | Status | Grant Date |
|------------------------|----------------------------------------------------|--------|------------|
| 6,425,266 | Low Temperature Hydrocarbon Gas Separation Process | Issued | 7/30/2002 |

Gas Separation Process Schematic:



Also Offered:

Technology transfer assistance may be provided with a license.

Availability:

All serious inquiries for license will be considered.

For more information on licensing this technology contact:

Greg Wolf
Manager, Licensing and Technology Transfer
Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195
Telephone: (610) 481-4241
Fax: (610) 481-8971
E-mail: WolfRG@airproducts.com

tell me more
<http://www.airproducts.com>