

ABSTRACT

IMPROVED CARBON MONOXIDE PRODUCTION PROCESS

The present invention provides for a process for producing carbon monoxide. A feed gas stream of hydrogen, carbon monoxide and carbon dioxide is directed to a membrane unit which separates the feed gas stream into two streams. The stream containing carbon monoxide is directed to
5 second membrane unit for further purification and the stream containing the carbon dioxide and hydrogen is fed to a reverse shift reactor to produce more carbon monoxide. The carbon monoxide recovered from the reverse shift reactor is purified in a third membrane unit and directed back to the first
10 membrane unit and is further purified and recovered as additional carbon monoxide product.

Figure 1



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