ABSTRACT OF THE DISCLOSURE

CO-PRODUCTION OF CARBON MONOXIDE-RICH SYNGAS WITH HIGH PURITY HYDROGEN

A process is provided for simultaneously producing a syngas product having a H_2/CO ratio of less than 2.5 and a hydrogen gas product. The process includes increasing an amount of carbon dioxide being fed to a secondary reformer with carbon dioxide extracted from: (a) an effluent from a primary reformer and (b) an effluent from the secondary reformer. An apparatus for performing the process is also provided.

(Figure 1A)