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(54) Title (EN): SYSTEMS AND METHODS FOR MICROWAVE REMOVAL OF NH₃ FROM ADSORBENT MATERIAL

(54) Title (FR): SYSTÈMES ET PROCÉDÉS D'ÉLIMINATION DE NH₃ PAR MICRO-ONDES D'UN MATÉRIAU ADSORBANT

(57) Abstract:

(EN): Method and systems for desorbing NH₃ from an NH₃-adsorbent material by exposing the adsorbent material to microwave radiation are described. Also described are methods for increasing an NH₃ cracker's NH₃ utilization and reducing the chance of downstream process contamination. Also described are methods of producing high pressure, high purity H₂ from NH₃.

(FR): L'invention concerne un procédé et des systèmes permettant de désorber le NH₃ d'un matériau adsorbant le NH₃ en exposant le matériau adsorbant à un rayonnement micro-ondes. L'invention concerne également des procédés permettant d'augmenter l'utilisation de NH₃ dans un craqueur de NH₃ et de réduire le risque de contamination du processus en aval. L'invention concerne également des procédés de production de H₂ haute pression et haute pureté à partir de NH₃.

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