



[12] Patent

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[21] Application No.: GCC/P/2002/1831 [22] Filing Date: 27/01/2002 [72] Inventors: 1- Ridha Ibrahim Salih, 2- Erik Fareid [73] Owners: 1- Ridha Ibrahim Salih, P.O. Box 73844, Abu Dhabi, United Arab Emirates; 2- Erik Fareid, N-3970 Langesund, Norway	[51] Int. Cl. ⁷ : C01C 3/10 [56] Cited Documents: - US 4174377 A (L.E. TRIMBLE et al.) 13 November 1979 - BR 9005218 A (PAULO ABIB ENGENHAIA SA) 14 April 1992

[54] A PROCESS FOR MAKING SODIUM CYANIDE (NaCN) BY THE VAPOUR-PHASE REACTION OF AMMONIA, METHAN AND OXYGEN FOLLOWED BY THE OBSORPTION OF THE RODUCT GAS BY SODIUM HYDROXIDE

[57] Abstract: The invention relates to an improvement compared to the Andrussow process for making Hydrogen Cyanide (HCN) and Sodium Cyanide (NaCN). Particularly, the invention relates to improvement of the efficiency of the DR-Process compared to the Andrussow process. It has been discovered in the DR-Process that the synthesis of NaCN by the vapour-phase reaction of ammonia, methane and oxygen followed by the absorption of the product gas by sodium hydroxide to produce sodium cyanide yield of NaCN, can be increased by the production of intermediate products, HCNO and HNCO, to an ammonia and methane conversion of more than 75%. Typically the conversion of ammonia and methane to sodium cyanide according to the invention is more than 90% as shown in Figure No. 1 and in Table No. 3 of the Detail Description. The new technology shown in this patent may be applied in any scale: either by modification and upgrading of existing or old production plants of Cyanides or chemical acids to produce NaCN using DR-Process; or by designing a new plant, as shown in Figure No. 2 of the Detail Description.

No. of claims: 1