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Utilization of Solar Energy as a Fuel in Production of Energy Intensive Industrial Products

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in he d c i n f d me ic, c mme cial and ind ial d c ch a ; h d gen, ni gen, gen, ing f m a e elec l i , ai e a a i n; amm nia n he i and ea n he i ce e . e e d c can be b ained b chemical eac i n/ ce ing f he e b ance . H d gen can be b ained f m a e ing elec l i ce and ni gen can be b ained f m ai h gh ai e a a i n ce ; ni gen can be n he i ed i h h d gen ge amm nia in he amm nia n he i ce .

CO_2 and amm nia can be ili ed d ce ea b e f he ea n he i ce . In ea n he i ce , amm nia and ca b n di ide a e fed in he eac a high e e (240 ba g), and he ea l i n i hen c ncen a ed gi e 99.6% m l en ea, and g an la ed f e a fe ili e and chemical feed ck [11]. e maj im i ie f m he ea d c i n eac i n, incl ding a e and nc n med eac an ch a ; amm nia, ca b n di ide and amm ni m ca bama e can be em ed in h ee age . Fi l he e e i ed ced f m 240 17 ba g and he l i n i hea ed, hich ca e he amm ni m ca bamade dec m e in amm nia and ca b n di ide. e e e i hen ed ced 2.0 ba g and nall -0.35 ba g, i h m e amm nia and ca b n di ide being l a each age, and a l i n f ea i di(m)3 (a)dbe ed in g a f ee f66nald im ( )-5-6 (i)12 ( )-5 (i(d)0 (k [2 (f66n (.)4 ( )0.-5 (ai)9 (n)0 (g a)19 ( )6 (m)]0.033 0 -1 f aa(a)-4 ce f ( )-5minl3 c i e .I9 h9 ide am6 71 e 1( )e5 ( )-6 (c)-76 heOn(a1( )6ben)4 (e)1 ( ) 2 0.5(.)12f 0.5( )-6 (c)-7 ( )0.5((de a)9 (

elec ical e , able a e and ea in a elf-c n ained manne . I c ld e e he e f mee ing ba ic ameni ie f elec ical e and able a e and c mme cial and ind ial need ch a ea d c i n f il fe ili a i n.

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