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**REEL 15**

R E S T R I C T E D

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BAG 3043 TARGET NO.30/4.02 LEUNA  
(Orig. Iden. Reel 15A)

<u>ITEM INDEX:</u>	<u>Serial No.</u> <u>Pages</u>
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15. <u>German and Hungarian Petroleum. French Refineries</u>	
Letter summarizing aviation gasoline processes found in France after the occupation. August 8, 1940	1467-1564
Memoranda of conference in Paris, July 26, 1940, discussing French refinery possibilities. Conclusion that only the hydrogenation plant at Lievin was worth expanding with possible production of 16,000 tons per year of gasoline. Additional production could be built better and safer within Germany itself. 1940.	1469-76
Report on operations and requirements of individual refineries in Hungary. November, 1940	1477-93
Letter concerning location and supply of natural gas in Hungary. September 4, 1942	1494
Cracking equipment in Petfurdo July 21, 1942	1495-1500
Other memoranda on the petroleum industry in Hungary with tables of products and some flow diagrams. 1942-43	1501-57
Research memorandum on composition of Hungarian petroleum, with charts. May, 1944	1558-64
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16. <u>Shale Oil</u>	
This section contains several memoranda describing experimental work and analyses and speculating on the possibilities of commercial production. Pros and cons are given on Page 1604 in a memo by Dr. Harold of the Leuna works, dated June 23, 1944. 1942-1945	1565-1617
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17. <u>Analytical Methods (miscellaneous).</u>	
This section has been abstracted elsewhere in considerable detail.	1618-2038
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Note: After Page 2038 there is a twelve page insert of a document by Dr. Walter Kronig concerning the production of aviation gasoline and heating oil by hydrogenating coal at	1-12

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Belchhammer at 700 atmospheres. The memo is dated May, 1945, and states that all data and flow sheets are put down from memory but could be supplemented by his own notes left at Ludwigshafen if they still can be found. Data are based on an 8000 hour year. May, 1945.

The analytical methods are then continued to page - - - - 2389

18. Patent Applications

These apparently are a group of "suggestions" for patent applications. It is not clear whether patents actually were applied for. 2390-2643

Method for evaporating foaming solutions. Material may be passed through a tube where it is heated above the saturation temperature of the vapor and then flashed from a flash drum. One diagram May, 1942 2390-92

Method for production of normal-butylene hydrogen chloride is split out of normal butyl chloride under elevated pressure so that liquid hydrogen chloride may be separated from the product by fractional distillation. May, 1942 2393-96

Method for clarifying the reaction products of carbon monoxide and hydrogen. Product is dissolved in a solvent and treated with absorbents. June, 1943 2397-404

Method of reacting gases by circulating the catalyst from reactor to regenerator and back. July, 1942 2404-13

Method of improving carbon monoxide-hydrogen reaction products. Product is treated with bisulfite. Sept. 1942 2414-18

Production of motorfuel. Oxygen containing products from the reaction of carbon monoxide and hydrogen are mixed with the products of coal hydrogenation and the mixture passed over a hydrogenation catalyst. January, 1943 2419-22

Method for preparation of lower boiling aromatic hydrocarbons. Higher boiling aromatics are passed over an aluminum or magnesium catalyst containing from 0.2 to 10% molybdenum oxide. June, 1943 2423-25

Method for preparation of diolefins. Substituted dioxanes are passed over a catalyst to split out water, phosphorus acids on Kieselgur may be employed. June, 1943 2426-29

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Method for preparation of higher molecular weight alcohols. Less than one molecular weight of a sodium alcoholate is reacted with two mols of alcohol to produce hydrogen gas and a new alcohol having twice as many carbon atoms as the starting material. May-September, 1943

2630-35

Method for dehydrogenating gases. Saturated hydrocarbons are led over catalyst of the oxides of metals that are reduced with difficulty. Conditions are such that the catalyst is substantially unchanged and therefore easily regenerated. November, 1943

2636-40

Method of conversion of hydrocarbons. Knock-rating of hydrocarbons is improved by passing through a catalyst bed where the catalyst particle size becomes progressively finer. June, 1944

2641-43

19. Reports of Investigations. Lectures

Report on calculation of organic gas equilibria from basis of spectroscopic data by Dr. Hans Sachsse of the Ammonia Laboratory at Oppau with three tables and twenty graphs.

2445-2504

- |                               |                     |
|-------------------------------|---------------------|
| 1. Hydrogen, Graphite         | 6. Ethylene, Ethane |
| 2. Acetylene                  | 7. Methane          |
| 3. Diacetylene                | 8. Benzene          |
| 4. Vinyl-acetylene, Butadiene |                     |
| 5. Isobutane, Isobutylene     |                     |

November, 1935

Report on Researches in hydrocarbon synthesis according to Franz Fischer by Dr. K. Meisenheimer of the Ammonia Laboratory at Oppau. 1. Oxide catalysts prepared by roasting corresponding salts. 2. Catalysts precipitated as hydroxide by KOH. 3. Same by K<sub>2</sub>CO<sub>3</sub>. 4. Catalysts on a supporting base. 5. Copper containing catalysts. 6. Preparation of paraffins. December, 1937

2505-20

Report on extracted hydrogenation products of brown coal according to Unde and Pfirrmann. Autoclave research and semiscale research. Flow diagrams and tables.

2521-51

Research on the separation of Gaseous Hydrocarbons from the gas mixture by washing with liquids. Laboratory experiments and technical experiment at Leuna. December, 1938

2552-79

Alkylbenzenes: Preparation, properties and use as Knock improver and safety motor fuel by Drs. Bahr and Kolb, Leuna Works. The safety factor results because most of them boil above 200°C. March, 1939

2580-2607

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