

T.O.M. Reel 205

INDEX - MICROFILM REEL 205
(Original designation LF - 135)

GENERAL SUBJECT

GROUP I - DOCUMENTS OF I. G. FARBEN INDUSTRIE A. G.
DEALING WITH BRIQUETTING, LOW TEMPERATURE
CARBONIZATION, PRODUCTION OF SOLID COKE AND
FUEL OIL AND A COMBINED HYDROGENATION-LOW-
TEMPERATURE-CARBONIZATION PROCESS.

GROUP II - REPORTS OF THE MEETINGS OF RESEARCH WORKERS
OF THE I. G. FARBEN INDUSTRIE A. G. ON OIL.
"OELBESPRECHUNGEN" - 1936 - 1943.

GROUP III - HOCHDRUCKVERSUCHE LABORATORIES. MISCELLANEOUS
REPORTS ON CARBONIZATION AND HYDROGENATION.
BAHR REPORTS.

GROUP IV - HOCHDRUCKVERSUCHE LABORATORIES. MISCELLANEOUS
REPORTS ON GAS-PHASE CATALYSTS.

GROUP V - HOCHDRUCKVERSUCHE LABORATORIES. MISCELLANEOUS
PAPERS ON LUBRICANTS.

GROUP VI - VISCOUS-PHASE PROCESS FOR ASH REMOVAL FROM COAL.

GROUP VII - REPORT ON THE STATE OF RESEARCH ON REMOVING
ASH FROM COAL BY THE HÖCHST KNEADING PROCESS.

Source of Documents: Griesheim Central I. G. Library

Folder Nos.: s 29/VI-C-7 s 27/IX-C-7 s 3/III-E-6
 s 29/VI-A-3 s 31/IX-A-11
 s 29/VI-C-8 s 3/III-E-8

Filmed by: Industry Branch, FIAT.

Date: 5 March 1946.

GROUP I - Briquetting, low temperature carbonization, production of solid coke and fuel oil, and combined hydrogenation-low-temperature-carbonization process.

(Item)

- | | |
|---|-----------|
| 1. Production of phenols from oils. | 1 - 19 |
| 2. Production of briquetting agents from slightly hydrogenated coal or by working up of hydrogenation residues with particular regard to the combination of hydrogenation and low temperature carbonization. | 20 - 74 |
| 3. "Hykeks" process. Technical briquetting and low temperature carbonization experiments with Upper Silesian coal, hydrogenation residues and dehydrated coal. | 75 - 97 |
| 4. "Hykoks" process. Technical experiments aiming at the production of low temperature carbonization tar and low temperature carbonization coke ("Hykoks") from coals with an insufficient baking capacity in combination with hydrogenation products (hydrogenation residues and slightly hydrogenated coal) by means of briquetting and low temperature carbonization of the briquettes. -- Gasification of low temperature carbonization coke. | 98 - 132 |
| 5. Production of solid coke by means of low temperature carbonization of briquettes from badly baking coals with addition of hydrogenation pitch or hydrogenation residues. | 133 - 163 |
| 6. Production of solid coke and fuel oil by means of low temperature carbonization of briquettes from badly coking coals with addition of slightly hydrogenated coal or hydrogenation residues. | 164 - 194 |
| 7. Production of solid coke by means of low temperature carbonization of briquettes from badly baking coals with addition of hydrogenation pitch or hydrogenation residues. | 195 - 225 |
| 8. Production of solid coke and fuel oil by means of low temperature carbonization of briquettes from badly baking coals with addition of slightly hydrogenated coal or hydrogenation residues. | 226 - 255 |
| 9. Low temperature carbonization of briquettes from mixtures of hydrogenation products (or bitumen) and bituminous coals, producing solid coke. | 256 - 325 |

GROUP I - Cont'd.
(Item)FRAME NOS.

- 10 Combined short hydrogenation-low-temperature-carbonization process. Large-scale experiment aiming at the briquetting of lignite-hydrogenation-residue mixtures, subsequent low temperature carbonization of these briquettes and gasification of the low temperature carbonization coke formed. 326 - 351
- 11 Possibilities for the accelerated execution of the Oil Plan by means of the combined short hydrogenation-low-temperature-carbonization and gasification process. 352 - 365
- 12 Combined hydrogenation-low-temperature-carbonization process. Short-hydrogenation experiments in stall 3 at Leuna. 366 - 394
- 13 Low temperature carbonization experiments with Hy-sludge mixed with coal. 395 - 428
- 14 Investigations aiming at increasing the tar yields by means of a combined hydrogenation-low-temperature-carbonization process. 429 - 472

GROUP II - Reports on Oil Conference.
(Item)

- 1 Report on the first internal discussion of Section I in Berlin, 20 January 1943. 473 - 489
- 2 Report on the Petroleum conference in Leuna, 22 Dec. 1937 490 - 538
- 3 Report on the 2. Petroleum conference in Berlin, 17 Dec. 1936. 539 - 589
- 4 Report on the first Petroleum conference in Ludwigshafen on the 20 Feb. 1936. 590 - 611

GROUP III - Bähr Reports. Miscellaneous reports on carbonization and hydrogenation.
(Item)

- 1 Calculations of the various carbonization experiments. 612 - 633
- 2 Combined short-hydrogenation carbonization process. 634 - 659

T.O.M. Reel 205
GROUP III - Cont'd. (Bahr Reports)
(Item)

FRAME NOS.

- 3 Production of shale briquettes from mixtures of coal with the addition of hydrogenation residues and sulfite liquor. 660 - 678
- 4 The use of pour-point depressants in fuel oils. 679 - 683
- 5 Experiences at Leuna with sludge filtration. 684 - 688
- 6 Production of lubricants from hydrogenation products by cracking at elevated temperatures and pressures and polymerization of cracking products. 688 - 718
- 7 Preparation of propylen and bütyleen from propane and butane resp. by the chlordehydrogenation process (Chlordéhyd). 719 - 725

GROUP IV - Miscellaneous Reports on Gas Phase Catalysts.
(Item)

- 1 WS₂ in atmospheric-pressure cracking. 726 - 727
- 2 WS₂ in atmospheric-pressure cracking (summary). 728 - 729
- 3 Further development of pure WS₂ to Ni activated and diluted catalysts. 730 - 732
- 4 The influence of temperature on the results of pre-hydrogenation with concentrated and diluted catalysts. 733 - 734
- 5 Production of 6434. 735 - 736
- 6 Absorption of hydrogen on tungsten sulfide. 737
- 7 Hydrogenation - splitting of paraffins over tungsten sulfide: experiments in autoclaves. 738 - 754
- 8 Splitting activity of various catalysts. 755
- 9 Development of catalysts. 756 - 758
- 10 Frankfurt lecture: WS₂ in atmospheric-pressure cracking. (759 - 767)
- 11 Splitting and isomerization of iso-octane and normal octane over cat. 5058. 768

GROUP IV - Cont'd. (Miscellaneous Reports on Gas Phase Catalysts.)

FRAME NOS.

12	Reactions without change of the C-skeleton.	769
13	Hydrogenation, dehydrogenation and splitting of coronene over WS ₂ (B. bomb experiment).	770 - 774
14	Re problem: highly condensed aromatics, asphalts and catalysts (appendix: N ₂ containing compounds and catalysts).	775 - 777
15	WS ₂ as a catalyst for the prehydrogenation of polynuclear aromatics.	778
16	Comparing oxides and sulfides (experiments 1935).	779
17	Note on splitting normal-heptane and iso-octane over 5058 at 250 atm.	780
18	Experiments on regulating the aromatics naphthalene equilibrium over tungsten sulfide catalyst 5058.	781 - 786
19	Splitting of gas oil P 1203 over various catalysts.	787
20	Benzination over 5058 at various temperatures.	788 - 791
21	100 atm. experiment with catalyst 5058, on gasoil up to 23 MV.	792 - 799
22	Comparing the performances of 5058 at various stages of density of the catalyst.	800 - 801
23	The influence of "grain" - or "pill" size on the splitting activity of 5058.	802 - 804
24	The influence of the grain size of WS ₂ catalysts in benzination.	805 - 807
25	The effect of the grain size of a catalyst on the benzination.	808 - 810
26	Tungsten sulfide as isomerization catalyst for butane.	811
27	Catalytic isomerization of aliphatic hydrocarbons.	812
28	Methylcyclopentane from benzene or cyclohexane, resp.	813 - 816
29	Experiments on hydrogenation of crude naphthalene with 5050.	817

GROUP IV - Cont'd. (Miscellaneous Reports on Gas Phase Catalysts.)

FRAME NOS.

30	Hydrogenation of benzene over K5058.	818
31	Reduction of m-cresol over WS ₂ .	819
32	Re lecture Frankfurt on WS ₂ catalyst.	820 - 821
33	Instruction for the reduction of catalysts in small scale apparatus.	822
34	On adsorption of methylene blue on various catalysts or catalyst carriers.	823
35	Some experiments on adsorption and catalysis with K5058.	824 - 848
36	On adsorption of gases on catalyst carrier materials and on a hydrogenation catalyst.	849 - 859
37	Examination of FeS-WS ₂ catalysts by electron refraction.	860
38	Examination of WS ₂ catalysts by electron refraction.	861 - 862
39	Use of molybdenum- and tungsten sulfide catalysts for pressure hydrogenation.	863 - 871
40	Sulfide gasphase-catalysts, particularly tungsten sulfide, in technical coal-hydrogenation.	872 - 880
41	Note on the displacement of the hydrogenation-equilibrium of coronene or pyrene by varying hydrogen-pressure.	881 - 894

GROUP V - Miscellaneous Papers on Lubricants.

(Part) I. Lubricating oil.

1	Preparation of highly viscous lubricating oils. State of research in high-pressure experiments.	896 - 907
2	Lubricating oils.	908 - 911
3	Hydrogenation of petroleum waxes for the synthesis of lubricating oils.	912 - 921
4	Oxydation.	922 - 927
5	Abstract from study by K. D. Wolfson: "Molecular physical processes in lubrication."	928 - 929
6	Physical theories on the lubrication process.	930

GROUP V - Cont'd.
(Part) I - Lubricating oil.

T.O.N. Reel 205

FRAME NOS.

- | | | |
|----|--|-----------|
| 7 | Polymerization of chemically pure unsaturated hydrocarbons to products possessing characteristics of lubricating oils. | 931 - 932 |
| 8 | Synthetic lubricating oils from pure hydrocarbons. | 933 - 934 |
| 9 | Relations between structure of pure hydrocarbons and their lubricating qualities. | 935 - 938 |
| 10 | Hugel's views on the temperature/viscosity curve of lubricating oils. | 939 - 942 |
| 11 | Lubricating oils prepared by molecular linkage of paraffin. | 943 - 944 |
| 12 | Concepts and definitions in the theory of lubrication. | 945 - 947 |
| 13 | Judging lubricants with the aid of testing machines. | 948 - 955 |
| 14 | High pressure lubricants. | 956 - 957 |

(Part) II (Group V)

- | | | |
|---|---|-----------|
| 1 | Production of ethylene from Saar gas ethane by thermal cracking and separation of ethylene by copper lye (Haeuber's method) | 958 - 970 |
| 2 | Literature survey on ethylene lubricating oil (excl. confidential applications). | 971 - 974 |
| 3 | Description of, and data on, a plant to be constructed at Poelitz, for production of cold-resistant lubricating oil SS 900. | 975 - 980 |

(Part) III (Group V)

- | | | |
|---|---|-----|
| 1 | Introduction of sulfur into ester lubricating oils. | 981 |
|---|---|-----|

GROUP VI Viscous-phase Process for Ash Removal from Coal.

982 - 1000

GROUP VII Report on the State of Research on Removing Ash from Coal by the Hochst Kneading Process.

1001 - 1020