#### INDEX - T.O.M. REEL 296 (Original Designation FIAT Reel K-29) PB L70218

## Frames

These frames plus T.O.M. Reel 295, Frames 6524-6528 make up complete report concerning the after-treatment of synthetic oil with granosil, aluminum chloride and catalyst oil and the transformation of the residues to granular form. Report signed by Clar, dated July 21, 1939, Ruhrchemie A.G., Oberhausen-Holten.

Tests on the preparation of residue oil with maximum viscosity from unrefined cracked gasoline--AlCl3 used as catalyst. Report signed by Tramm and Clar, May 28, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Five tables attached.)

Two reports on the working up of used catalyst oil. Reports signed by Tramm and Clar, dated April 22, 1940 and Feb. 17, 1940, Ruhrchemie A.G., Oberhausen-Holten. Complete report by Tramm and Clar, dated April 22, 1940, is also reproduced on T.O.M. Reel 291, Frames 2712-2719; 2820-2821 (Frames 2720-2819 are omitted from T.O.M. Reel 291.)

The influence of catalyst oil on the viscosity of lubricating oils during production. Aluminum chloride used as catalyst. Report signed by Clar, dated June 22, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Three tables attached.) (Report is also reproduced on T.O.M. Reel 290, Frames 1930-1934.)

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6569-6572	After-treatment of synthetic oil by catalyst oil and a small quantity of aluminum chloride. Report signed by Tramm and Clar, dated March 28, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)
6573–6579	Preparation of shock-absorber fluid from cracked gasoline. Report signed by Clar, dated June 3, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Five tables attached.)
6580-6602	Distillation of lubricating oils in high vacuum. (Molecular distillation.) Report dated March 3, 1943, Ruhrchemie A.G., Oberhausen-Holten. (Recognition for work is given to Dietsch and Kuhnel. Literature references, three pages of diagrs., and four pages of curves attached.) (Note of transmittal, signed by Dr. Tramm, dated July 20, 1943, attached to beginning of report.)
6603-6615	Comparison of the catalytic cracking of gasol from the Fischer-Tropsch synthesis and from petroleum. Report signed by Kolling, dated May 12, 1943, Ruhrchemie A.G., Oberhausen-Holten. (German Patent Applications I 64,792 and I 58,775 referred to. Three tables and five pages of curves attached.)
6616-6629	Artificial aging of oils by compressed air and research with various methods of stabilization. Report signed by Tramm and Clar, dated Feb. 17, 1943, Ruhrchemie A.G., Oberhausen-Holten. (Six tables and one diagr. attached.)
6630-6633	Density of synthetic oil depending on the nature of the primary gasoline and the viscosity of the oil. Report signed by Clar, dated April 13, 1942, Ruhrchemie A.G., Oberhausen-Holten. (One curve attached.)
663 <del>4-</del> 6 <b>7</b> 01	Preparation of oils from primary products of the gasoline pressure synthesis. Series of four reports signed by Tramm and Clar, dated Jan. 10, 1941, Mar. 15, 1941, June 24, 1941 and July 15, 1941, Ruhrchemia A.G., Oberhausen-Holten. (Twenty-six tables and 3 graphs attached.)
6702-6713	Stabilization of fuel oils by inhibitors. Report signed by Clar, dated Jan. 3, 1941, Ruhrchemie A.G., Oberhausen-Holten. (Eight tables attached.)
671 <del>4-</del> 6725	Refining of circulated gasoline before the oil synthesis by means of a cold zinc chloride solution. Report signed by Clar, dated Feb. 17, 1945, Ruhrchemie A.G., Oberhausen-Holten. (Six tables attached.)

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6726-6732	Transformation of cracked gasoline in serial syntheses to residue cils containing 50% "50 Brightstock." Report signed by Clar, dated Jan. 9, 1945, Ruhrchemie A.G., Oberhausen-Holten. (Three tables attached.)
6733 <b>–6744</b>	Experiences with the artificial aging of synthetic oils. Report signed by Clar, dated March 14, 1944, Ruhrchemie A.G., Oberhausen-Holten. (Six tables and two diagrs. attached.)
6745-6765	Influence of cracked gasoline on the preparation of lubricating oil. Report signed by Gottschall, dated March 10, 1944, Ruhrbenzin A.G., Oberhausen-Holten. (Nine pages of tables and nine pages of curves attached.)
6766 <del>-6</del> 777	Preparation of highly viscous residue oils from pre- purified cracked gasoline by synthesis in series with AlCl <sub>3</sub> as catalyst. Report signed by Clar, dated Dec. 20, 1943, Ruhrchemie A.G., Oberhausen-Holten. (Seven tables attached.)
6778-6794	Model experiment for the preparation of oil with the addition of mixtures of cracked and circulated gasoline. Report signed by Clar, dated Dec. 16, 1943, Ruhrchemie A.G., Oberheusen-Holten. (Eight tables attached.)
6795-6805	Stabilization of synthetic oils by addition of inhibitors before the synthesis. Report signed by Clar, dated Oct. 12, 1943, Ruhrchemie A.G., Oberhausen-Holten. (Seven tables attached.)
6806-6818	Preparation of residue oils with a maximum viscosity from prepurified cracked gasoline by separate synthesis (Einzelsynthese.) Report signed by Clar, dated Sept. 16, 1943, Ruhrchemie A.G., Oberhausen-Holten.
6819-6822	Use of "TVP" gasoline in the lubricating oil installation. Report dated Oct. 3, 1938, Ruhrchemie A.G., Oberhausen- Holten. (Two pages of tables and one graph attached.)
68 <b>2</b> 3–685 <b>7</b>	Catalytic dehydrogenation of propane. Report signed by Tramm and Speitmann, dated April 25, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Tables and curves included.)
6858-6861	Tests on the refining of "Ruhrgasol" by active carbon. Report signed by Schubert, dated 1938, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)

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6862-6865	Olefin content of gasol and gasoline from magnesium- thorium catalysts. Report dated may 28, 1938, Ruhr- benzin A.G., Oberhausen-Holten. (Two tables attached.)
6866-6870	Determination of gasol in cracked gas and in unstabilized cracked gasoline. Report dated March 18, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Three tables attached.)
6871-6878	Plant analyses of the plant laboratory of the Ruhrchemie A.G. Gasol determination. Analyses. Reports dated during Feb. and March 1938, Ruhrbenzin A.G., Oberhausen-Holten.
6879-6911	Preparation of alcohols from the C3 and C4 fractions of gasol and the preparation of isopropyl ether from isopropyl alcohol. Report signed by Spiske, dated Jan. 5, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Nine tables incl.)
6912-6925	Iron catalysts in the gasoline synthesis. Four reports signed by Roelen (Dec. 20, 1939), Eahr (Oct. 14, 1939), Roelen (Sept. 20, 1939) and Landgraf (Aug. 3, 1939); Ruhrbenzin A.G., Oberhausen-Holten. (Landgraf report has 7 pp. of diagrs. attached.)
6926-6929	Preparation of iron oxide for iron catalysts. Report signed by Blase, dated May 17, 1939, Ruhrchemie A.G., Oberhausen-Holten. (One diagr. attached.)
6930-6931	Determination of iron in catalysts. Report signed by Roelen, dated April 6, 1939, Ruhroenzin A.G., Oberhausen- Holten.
6932-6935	Lurgi iron catalysts. Two conference reports signed by Bahr, (March 4, 1939) and Alberts (June 28, 1938), Ruhr-chemie A.G., Oberhausen-Holten.
6936-6940	New method of cooling catalyst furnaces for the synthesis of hydrocarbons. Report on a patent specification signed by Roelen, dated Dec. 22, 1959, Ruhrbenzin A.G., Oberhausen-Holten.
6941-6944	Paraffin synthesis with a new cobalt catalyst. Report on a patent specification signed by Roelen, dated Lec. 19, 1939, Ruhrbenzin A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 288, Frames 997-1000.)

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6945 <b>–</b> 6948	Influence of the iron content or kieselguhr on the properties of catalysts for the hydrocarbon syntheses, particularly with regard to the reduction in methane formation. Report signed by Dahm, dated Oct. 23, 1939. Ruhrchemie A.G., Oberhausen-Holten. (Two pages of curves attached.)
6949-6951	Preparation of a phosphoric acid polymerization catalyst. Report signed by Tramm, dated Sept. 19, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 289, Frames 1565-1567 and T.O.M. Reel 290, Frames 2021-2023.)
6952-6957	Dilute catalysts for the aromatization of hydrocarbons. (Heat control during catalyst regeneration.) Confidential report signed by Rottig, dated Sept. 7, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Complete report, which includes graphs, curves, diagrs. and tables, appears on T.O.M. Reel 290, Frames 2024-2064.)
6958	Catalysts for an increased production of paraffin. Report dated Aug. 24, 1939, Ruhrbenzin A.G., Oberhausen-Holten. (This frame is supplement to Frames 6941-6944 which concerns cobalt catalysts used in paraffin production.)
6959-6967	Development of catalysts for the Fischer-Tropsch synthesis. Report signed by Roelen, dated Aug. 18, 1939, Ruhrbenzin A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 287, Frames 340-348.)
6968-6972	Preparation of catalysts with a high cobalt density pre- cipitated on purified kieselguhr: 100 Co, 15 ThO2, 12.5 Kgr. Report dated Aug. 7, 1939, Ruhrbenzin A.G., Ober- hausen-Holten. (Report is also reproduced on T.O.M. Reel 287, Frames 40-43 and Frames 349-353.)
6973-6980	Activity of aromatization catalysts using alumina as carrier substance. (Investigation is made of calcination temperature of Al <sub>2</sub> O <sub>3</sub> and influence of alkali content of Al <sub>2</sub> O <sub>3</sub> on activity.) (Three tables in the form of graphs are attached.) Report signed by Rottig, dated July 11, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 289, Frames 1780-1787 and T.O.M. Reel 290, Frames 2069-2076.)

Reel 290, Frames 2069-2076.)

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6981-6986	The causes of cobalt losses in synthesis installations. Report dated June 16, 1939, Ruhrbenzin A.G., Ober-hausen-Holten.
6987-6988	Sulfur content in solutions for the preparation of co- balt catalysts. Report signed by Roelen, dated May 25, 1939; Ruhrbenzin A.G., Oberhausen-Hölten.
6989-6990	Modification of the grain solidity of cobalt catalysts. Report signed by Heckel dated April 28, 1939, Ruhrbenzin A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 288, Frames 928-929.)
6991-6994	Tests on the precipitation of cobalt synthesis catalysts with carbon dioxide-ammonia gas mixtures. Report by the Kaiser Wilhelm Institut für Kohlenforschung, Mülheim, 1938.
6995 <b>~7.004</b>	Regeneration of thorium from thorium catalyst sludge at Brabag, Schwarzheide. Two reports signed by Buchner, dated Dec. 19, 1938 and Jan. 24; 1939. (Note of transmittal signed by Roelen precedes reports and note signed by Schuff, concerning the Brabag thorium catalyst, follows reports.) (Reports and note of transmittal are also reproduced on T.O.M. Reel 288, Frames 811-819.)
7005-7028	The Harnes catalyst plant and synthesis installation. Report signed by Gehrke and Schuff, dated Dec. 5, 1938, Courrieres-Kuhlmann, Harnes.
7029	Examination of kieselguhr. Report signed by Heckel, Nov. 28, 1938, Ruhrbenzin A.G., Oberhausen-Holten.
7030-7031.	The longevity of catalysts. Report signed by Roelen, dated Nov. 24, 1938, Ruhrbenzin A.G., Oberhausen-Holten.
7032-7036.	Recovery of thorium from the thorium catalyst sludge. Improved sulfate process. Report signed by Buchner and Roelen, dated Oct. 22, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One flow diagr. and one curve attached.) (Two reproductions of the report appear on T.O.M. Reel 288, Frames 841-850.)
7037-7039,	The thorium content of mixed catalysts. Report signed by Heckel, dated Oct. 6; 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Two pages of curves attached.)

Frames	
7040-7047	Influence of the kieselguhr type and of the reduction on the activity of catalysts. Report signed by Heckel, dated Sept. 8, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Five graphs attached.) (Report is also reproduced on T.O.M. Reel 287, Frames 377-384).
7048-7056	Japanese kieselguhrs as carrier substances for catalysts.  Report signed by Heckel, dated Sept. 7, 1938, Ruhrbenzin  A.G., Oberhausen-Holten. (Three tables and three pages of graphs attached.) (Report is also reproduced on T.O.M.  Reel 287, Frames 368-376.)
7057-7076	Two reports on aromatization catalysts: Report on catalysts K1-K87 and review on the method of action of catalysts K1-K87. Reports signed by Rottig, dated Aug. 30, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 290, Frames 1885-1898review is not reproduced.)
7077 <b>-70</b> 81	Tests on a new catalyst carrier "Eirichkorn." Report signed by Heckel, dated Aug. 24, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Two graphs attached.)
7082-7086	Determination of grit in kieselguhrs and quality of kieselguhr 120. Two reports signed by Roelen, dated Aug. 3, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Page of rules included with these reports is also reproduced on T.O.M. Reel 288, Frame 1040.)
7087-7090	Solubility and alkali resistance of kieselguhr. Report signed by Roelen, dated Aug. 3, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One table and one graph attached.) (Table and graph also appear on T.O.M. Reel 288, Frames 22-23.) (Complete report also appears on T.O.M. Reel 287, Frames 1041-1044.)
7091-7094	Large scale tests on the recovery of thorium by the sulfate method in the preparation of catalysts. Report signed by Buchner, dated July 27, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Flow diagr. attached.)
7095-7108	Oxidizability of cobalt catalysts and determination of tri-valent cobalt in cobalt catalysts. Report signed by Büchner, dated July 4, 1938, Ruhrbenzin, A.G., Oberhausen-Holten. (Report contains twelve attachments which consist of report by Roelen, dated July 2, 1938, one diagr., eight pages of graphs and two tables.) Attachments, with an additional table included, are also reproduced on T.O.M. Reel 288, Frames 934-946C.

Frames	
7109-7115	Experiences with thorium and magnesium catalysts by licensees at Rheinpreussen, Gewerkschaft Viktor, Brabag-Schwarzheide and Ruhrbenzin. Report signed by Schuff, dated June 15, 1938, Ruhrbenzin A.G., Oberhausen-Holten.
7116-7117	Tests on the methanization of carbonic acid. Report signed by Roelen, dated May 24, 1938, Ruhrbenzin A.G., Oberhausen-Holten.
7118-7123	Determination of the content of free metal in catalysts.  (Acid-vacuum method.) Working instruction signed by Roelen, dated Jan. 5, 1938, Ruhrehemie A.G., Oberhausen- Holten. (One sketch attached.) (Report is also repro- duced on T.O.M. Reel 287, Frames 32-37.)
7124-7128	Regeneration of cobalt solutions in catalyst manufacture by evaporation and crystallization. Report signed by Schenk, dated May-17, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Two tables attached.)
7129-7133	Recovery of thorium from the thorium catalyst sludge by the sulfate process. Report signed by Buchher, dated May 14; 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One flow diagr. and table attached.) (Report is also reproduced on T.O.M. Réel 287, Frames 74-79.)
7134-7135	Reducibility of cobalt catalysts with reference to the kieselguhrucontent. Report signed by Schenk, dated May 12, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Curve sheet attached:) (Report is also reproduced on T.O.M. Reel 288, Frames 699-4700.)
7136-7138	Influence of reduction conditions on the activity of thorium and thorium-magnesium catalysts. Report signed by Schuff, dated Mayell, 1938, Rubrbenzin A.G., Oberhausen-Holtens
7139 <b>-7</b> 163	The most favorable cobalt-kieselguhr proportion in co- balt catalysts. Report signed by Roelen and Heckel, dated May 2, 1928, Ruhrbenzin A.G., Oberhausen-Holten. (Report incorporates work of Dr. Kolbel and has eight graphs and seven tables attached.) (Report is also re- produced on T.O.M. Reel 292, Frames 3757-3781.)

Frames	
7164-7165	Influence of the reduction and the granular form on the cobalt density in cobalt catalysts. Report signed by Schenk, dated April 23, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One table attached.)
7166-7171	Thermal conductivity of catalysts. Report signed by Roelen, dated April 21, 1938, Ruhrchemie A.G., Oberhausen-Holten. (One diagr. and two tables attached.)
7172-7183	Influence of an increased rate of flow of the synthesis gas on the olefin content of synthetic gasoline. Report signed by Landgraf, dated March 28, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One diagr., three graphs and two tables attached. Note by Roelen, dated March 21, 1938, precedes report.)
7184 <sup></sup>	Carbon dioxide content of thorium and magnesium catalysts. Report signed by Schenk, dated Feb. 15, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (One table included.) (Report is also reproduced on T.O.M. Reel 288, Frame 703 and Frame 704 (duplicate).
7185 <b>-71</b> 88	Preparation of cobalt catalysts by compression. Report signed by Heckel, dated Jan. 28, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Two graphs attached.) (Report is also reproduced on T.O.M. Reel 288, Frames 954-957.)
7 <b>1</b> 89 <b>-</b> 7193	Report on the preparation of thorium-free cobalt-magnesium catalysts by Ruhrchemie A.G. Report signed by Roelen, dated Aug. 13, 1937, Ruhrbenzin A.G., Oberhausen-Holten. (One flow diagr. attached.) (Report is also reproduced on T.O.M. Reel 287, Frames 53-57 and Frames 171-175B.)
7194-7200	Results of synthesis with various catalysts. Tests made by Ruhrchemie during 1944. (Two tables and note signed by Roelen, dated Aug. 22, 1944, attached.)
7201-7209	The calculation of the yield in the synthesis of higher hydrocarbons. Report signed by Roelen, dated Aug. 1944, Ruhrchemie A.G., Oberhausen-Holten.
7210-7213	Iron catalysts. Conference report signed by Roelen, dated Jan. 7, 1944, Ruhrchemie A.G., Oberhausen-Holten.
7214-7215	Alcohol-forming iron catalysts. Report signed by Buchner, dated Sept. 21, 1945, Ruhrchemie A.G., Oberhausen-Holten.

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7216 <b>-72</b> 19	Report on the preparation of aromatizing catalysts on a laboratory scale. Report signed by Rottig, dated March 10, 1944, Ruhrchemie A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M. Reel 289, Frames 1755-1759.)
7220	This frame is missing.
7221-7225	Preparation of various polymerization catalysts. Report signed by Spiske, dated June 10, 1943, Ruhrchemie A.G., Oberhausen-Holten. (German Patent Appl. V 12,617 IVd/12 o referred to.) (Report is also reproduced on T.O.M. Reel 289, Frames 1539-1543.)
7226-7239	Catalysts for the hydrogenation of carbon monoxide. Report signed by Roelen, dated May 24, 1943, Ruhrchemie A.G., Oberhausen-Holten.
7240 <b>-</b> 7241 7250 <b>-</b> 7276	These two sets of frames make up complete report on synthesis of hydrocarbons with iron catalysts. Included are: Report by Pflegling, dated Sept. 11, 1940, (Frames 7271-7276 - one table attached). Report by Roelen, dated Sept. 12, 1940 (Frames 7261-7270) and 13 tables, dated Sept. 13, 1940 (Frames 7240-7241, 7250-7260).
7242 <b>-724</b> 9	Report on the investigation of the reaction water from the synthesis over iron catalysts. Report by Büchner, dated July 22, 1941. (Five tables attached.)
7250-7276	See Frames 7240-7241.
7277-7284	Preparation of highly active polymerization catalysts. Report dated April 22, 1943, Ruhrbenzin A.G., Oberhausen-Holten. (Six.graphs attached.)
7285-7293	Technical preparation of polymerization catalysts. Report signed by Spiske, dated March 10, 1942, Ruhr- chemie A.G., Oberhausen-Holten. (One flow diagr. attached.)
7294-7295	Apparatus for testing the durability of catalysts. Report signed by Schreiber, dated Oct. 27, 1941, Ruhrchemie A.G., Oberhausen-Holten. (One sketch attached.)
7296-7301	Concentrated cobalt-thorium catalysts. Report by Heckel and Roelen, dated Oct. 20, 1941, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)

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7302-730	Two reports on cobalt-nickel catalysts. Reports signed by Roelen, dated Sept. 24, 1941, and Schenk, dated July 22, 1941. Ruhrchemie A.G., Oberhausen-Holten. (Report is also reproduced on T.O.M., Reel 288, Frames 1119-1121.)
7308-7315	Preparation of aluminum silicate catalysts for hydrocarbon cracking. Report signed by Stuhlpfarrer; dated April 16, 1941, Ruhrchemie A.G., Oberhausen-Holten. (Five tables included.)
7316-7319	Use of nickel and cobalt-nickel catalysts in the gasol- ine synthesis. Report signed by Heckel, dated April 4, 1941, Ruhrchemie A.G., Oberhausen-Holten. (One table attached.) (Report is also reproduced on T.O.M. Reel 288, Frames 914-917.)
7320-7345	Production of highly active aromatization catalysts with alumina and chromium oxide as the chief constituents. Report signed by Petri, dated Nov. 5, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Six tables, eight pages of curves and one photo attached.) (Report is also reproduced on T.O.M. Reel 290, Frames 2252-2276. Photo is missing.)
7346-7354	Laboratory experiments concerning the detrimental in- fluence of steam on aromatizing catalysts. Report signed by Kolling, dated Nov. 18, 1940, Ruhrchemie A.G., Ober- hausen-Holten. (Two pages of curves attached.) (Report is also reproduced on T.O.M. Reel 289, Frames 1619-1627 and T.O.M. Reel 290, Frames 2161-2169.)
7355~7363	Testing of catalysts under pressure, with special considerations for conditions of synthesis on a large technical scale. Tests carried out by Klassen, report dated June 11, 1940, Ruhrbenzin A.G., Oberhausen-Holten. (Two diagrs. attached.)
7364-7365	Cracking of petroleum. Conference report by Knöllinger, dated Oct. 6, 1945, Ruhrchemie A.G., Oberhausen-Holten. (One flow diagr. attached.)
7366-7370	Catalytic cracking. Two conference reports signed by Tramm, dated June 21 and June 23, 1939.