INDEX - T.O.M. REEL 291 (Original Designation FIAT Reel K-24 PB L70215

Frames

2461-2469

These frames plus T.O.M. Reel 290, Frames 2458-2460 make up complete report on the flow resistance of aromatization catalysts. Report signed by Kolling, dated July 2, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Seven diagrs. attached.) (Text of report is also reproduced on T.O.M. Reel 297, Frames 7526-7530 and again on Frames 7531-7535 with one diagr. appearing on Frame 7536.)

2470-2485

Aromatization plant. Report signed by Tramm, dated July 3, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Conditions of procedure and five tables of cost calculations included.)

2486

Lubricants with high Polhöhe value. Short report signed by Tramm, dated June 4, 1940, Ruhrchemie A.G., Oberhausen-Holten.

2487-2514

Catalytic cracking of hydrocarbons (Diesel oil) to obtain gasoline. Confidential report signed by Stuhlpfarrer, dated May 31, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Twelve tables and figures 1-12c, consisting of graphs and a diagr., included with report.) (Reproduced also on T.O.M. Reel 295, Frames 6232-6259.)

Frames	
2515-2519	Comparison of Ipatieff and Ruhrchemie polymerization catalysts. Report signed by Spiske, dated March 15, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 295, Frames 6282-6286.)
2520-2525	Aviation oil. Influence of character and boiling limits of the used crack gasoline on the Polhohe and solidifying point of synthetic aviation oil. Report signed by Clar, dated May 30, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)
2526-2531	Bleaching agent. Comparison of products from the firm "Ostdeutsche Keramik" with tonsil. Report signed by Clar, dated June 2, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Three tables attached.)
2532-2567	These frames are a duplicate, in part, of the frames immediately following.
2568-2603	Report on the most recent experiment results obtained in the LT-pilot plant. Confidential report signed by Kolling, dated April 30, 1940, Ruhrchemie A.G., Oberhausen-Holten. (11 tables, 29 graphs and 14 diagrs. attached.) (Duplicated in part on Frames 2532-2567 and reproduced also on T.O.M. Reel 289, Frames 1666-1736.)
2604 - 2609 2710 - 2711	Investigation of aging of an after-treated 10° residue oil separated by distillation. Report signed by Clar, dated April 25, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Three tables and one graph attached.) (Both of these sets of frames make up complete report.)
2610-2709	These frames are missing.
2710-2711	See Frames 2604-2609.
2712-2719 2820-2821	Processing of catalysis oil. Report signed by Clar, dated Apr. 22, 1940. (Both of these sets of frames make up complete report.) (Reproduced also on T.O.M. Reel 296, Frames 6542-6563.)
2720-2819	These frames are missing.
2820-2821	See Frames 2712-2719.
2822-2835	Production of aviation oil. Investigation of AlCl ₃ treatment, aging, and resistance to oxygen. Report signed by Clar, dated April 30, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Nine tables attached.)

Frames 2836-2837 Work by Prof. Eucken on the use of the heat pump. Work by Dr. Dohse on a method for manufacturing ammonium nitrate from mine pit ammonia water. Report by Tramm, dated Apr. 27, 1940. Investigation of the products from the cracking plant. Report 2838-2847 signed by Schmitz, dated April 18, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two graphs attached.) The methanol synthesis. The production of higher alcohols, 2848-2864 aldehydes, etc. Literature and patent references cited. Report dated April 9, 1940, Ruhrchemie A.G., Oberhausen-Holten. Additions to "Kompressol" oil for preventing the formation of 2865-2868 foam. (Of the additives tried, castor oil and caprylic acid or pyrogallol and amyl alcohol were considered most effective.) Report signed by Clar, dated April 25, 1940, Ruhrchemie A.G., Oberhausen-Holten. (One table consisting of three parts attached.) 2869-2876 Distillation of synthetic oils. Investigation with post-treated and untreated distillates. Report signed by Clar, dated April 2, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Four tables and one graph attached.) • ...• Consumption and use of aviation gasoline. Translation into *2*877**–**28**8**5 German, by Tramm, of an article appearing in "National Petroleum News," Jan. 1940, p. 25 ff. Translation is dated Harch 19, 1940. Observations after one year's storage of post-treated residue 2886-2899 oils. (Aluminum chloride used as additive.) Report signed by Clar, dated Harch 1, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Nine graphs and two tables attached.) Grades of activity of Al₂O₃ as carrier material for catalysts. 2900-2907 Confidential report signed by Spiske, dated Feb. 14, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 295, Frames 6289-6296B.) Condition of aromatization plant. Report signed by Tramm, dated 2908-2911 Feb. 28, 1940, Ruhrchemie A.G., Oberhausen-Holten. Aromatizaing plant. Report by Kolling. dated Feb. 26, 1940, 2912-2913 Ruhrchemie A.G., Oberhausen-Holten. Catalytic cracking of aliphatic hydrocarbons. Translation into 2914-2971 German by Stuhlpfarrer, of an article appearing in the "Journal of the American Chemical Society," Vol. 61, pp. 3571-3580 (1939), written by Egloff, Morrell, Thomas, and Bloch. Translation is dated Feb. 26, 1940 and appears in duplicate on Frames 2941-2967. (Note of transmittal, dated March 13, 1940, precedes translation

1940, appears on Frames 2970-2971.)

and Tramm translation of the summary of the article dated Feb. 12,

T.O.M. Reel 291 Cont'd Frames Production of high octane gasoline. Report signed by Spiske, 2972-2976 dated Feb. 1, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two graphs and table attached.) (Reproduced also on T.O.M. Reel 289, Frames 1561-1564). 2977-2989 High octane gasoline by sulfuric acid alkylation. Translation into German, by Tramm, of a report written by S.H.McAllister which appeared in "National Petroleum News," Nov. 29, 1938, beginning on p. 512. Four tables are included in report. Translation is dated Feb. 28, 1940, Ruhrchemie A.G., Oberhausen-Holten. Investigation of an untreated residue oil separated by distillation. 2990-2997 (Analyses, oxygen test, mixture with sulfuric acid and aging concerned.) Report signed by Clar, dated Feb. 29, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Three tables and two graphs attached.) 2998-3002 Examination of two gasoline samples for their heptane content. (Tests by Ruhrbenzin and Rheinpreussen.) Date of test report, consisting of one table and two graphs, is Feb. 13, 1940. Note of transmittal, signed by Tramm, dated Feb. 27, 1940, Ruhrchemie A.G., Oberhausen-Holten, precedes report. Examination of I.G. Farben Standard aviation gasoline. Analysis 3003-3006 report consisting of a 3-page table is dated Feb. 9, 1940. Note of transmittal, signed by Tramm, dated Feb. 28, 1940, Ruhrchemie A.G., Oberhausen-Holten, precedes report. Further processing of aluminum oxide from the catalyst factory to 3007-3010 the completed catalyst for the LT-plant. Report signed by Spiske, dated Jan. 26, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 297, Frames 7563-7566.) Production of active aluminum oxide for the LT-plant. Report 3011-3020 signed by Stuhlpfarrer, dated Jan. 9, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two diagrs. attached.) Experimental program for the aromatization plant. (Toluene and 3021-3024 catalyst production discussed.) Report signed by Tramm, dated Jan. 12, 1940, Ruhrchemie A.G., Oberhausen-Holten. Experiments with the extreme bleaching of post-treated and 3025-3039 untreated oils with subsequent extraction of the bleaching agent. (Tonsil used as bleaching agent.) Report signed by Clar, dated

report.

Jan. 23, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Six tables attached.) (Note of transmittal, dated Jan. 26, 1940, precedes

Frames	
3040-3061	Monthly reports, January to October 1944. (Various processes reported.) Reports signed by Rottig, 1944, Ruhrchemie A.G., Oberhausen-Holten. (The report for July and one frame from the report for August are missing.)
3062-3068	Project Pechiney. Working up of primary products to lubricating oil, gasoline and automotive fuel gas. Report signed by Kolling dated June 13, 1944, Ruhrchemie A.G., Oberhausen-Holten. (One flow diagr. attached.) (Reproduced also on T.O.M. Reel 298, Frames 8257-8264.)
3069-3076	Plan of pressure-water gas circulating synthesis and the low pressure synthesis. Report signed by Tramm, dated Nov. 11, 1940, Ruhrchemie A.G. Oberhausen-Holten. (Two flow diagrs. attached.)
30 77-3079	Hydrogen drying for installation 462. Estimate for a silica gel drying process. Report of conference of Nov. 6, 1940 signed by Stuhlpfarrer, dated Nov. 8, 1940, Ruhrchemie A.G., Oberhausen-Holten.
3080-3084A	Blower installation for installation 462. Report of conference of Nov. 4, 1940 signed by Tapp, dated Nov. 5, 1940, Ruhrchemie A.G., Sterkrade. (Three flow diagrs. and two graphs attached.)
3085-3091	Process for the dehydrogenation of hydrocarbons. (Prevention of olefin cyclization.) Draft of a patent specification by Rottig, dated April 13, 1942, Ruhrchemie A.G., Oberhausen-Holten. (Note concerning patent specification, dated April 24, 1942, precedes draft.)
3092-3094	Dehydrogenation with acidic catalyst carriers. Report on German Patent Appl. R 562 signed by Rottig, dated March 11, 1942, Ruhrchemie A.G., Oberhausen-Holten. (Several patents referred to in report.)
3095-3110	Investigation of propylbenzene. Report signed by Clar, dated June 9, 1936, Ruhrchemie A.G., Oberhausen-Holten. (Eight tables attached.) (Duplicated on Frames 3111-3126).
3111-3126	Duplicate of Frames 3095-3110.
3127-3128	Production of ethyl benzene. Report signed by Tramm, dated Oct. 23, 1935, Ruhrchemie A.G., Oberhausen-Holten. (Duplicated on Frames 3129-3130.)
3129-3130	Duplicate of Frames 3127-3128.
3131-3140	Production of ethyl benzene. Report by Kolling, dated June 23, 1936, Ruhrchemie A.G., Oberhausen-Holten. (One graph attached.) (Duplicates of this report, but with graph omitted, are found on Frames 3141-3149 and Frames 3150-3157.)

Frames	
3141-314)	Duplicate of Frames 3131-3140 graph omitted.
3150-3157	Duplicate of Frames 3131-3140 graph omitted.
3158-3186	Manufacture of aviation gasoline from petroleum gasoline by fractionation. Secret report signed by Kolling, dated June 26, 1943, Ruhrchemie A.G., Oberhausen-Holten. (Twelve graphs and one diagr. attached.)
3187-3297	Inspection report on Rumanian fuel situation, July 18 - Aug. 6, 1941. Report signed by Tramm, dated Aug. 15, 1941, Ruhrchemie A.G., Oberhausen-Holten. (Twenty diagrs. and 14 tables and graphs attached.)
3298 - 3334c	Assembling the aromatizing (LT) plant. Report signed by Tramm and Kolling, dated March 14, 1942, Ruhrchemie A.G., Oberhausen-Holten. (Four tables and seven diagrs. attached.)
3335-3338	Relationship of steam pressure and octane number of the gasol content in gasoline produced with active carbon or by cracking. Report by Velde, dated Sept. 29, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Two tables attached.)
3339-3345	Properties of the primary products from thorium and magnesium-thorium catalysts. (Dependence of octane number on boiling behavior discussed.) Two reports by Velde, dated July 29, 1938 and June 17, 1938, Ruhrbenzin A.G., Oberhausen-Holten. (Reports are incomplete, figures and tables referred to are missing.) (Complete reproduction of report dated July 29, 1938, containing fifteen tables and three graphs, appears on T.O.M. Reel 299, Frames 423-451; and complete reproduction of report dated June 17, 1938, containing one table and two graphs, appears on T.O.M. Reel 299, Frames 452-456.)
334 6- 3351 3362 - 3363	Both of these sets of frames make up complete report on manufacture of aircraft engine oil. Report signed by Tramm, dated Nov. 27, 1941, Ruhrchemie A.G., Oberhausen-Holten. (One graph and one flow sheet attached.)
3352-3361	Improvement of the oxygen test of synthetic oils by addition of inhibitors (beta-naphthylamine.) Report signed by Clar, dated April 22, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Six pages of tables and one page of curves attached.) (Reproduced also on T.O.M. Reel 290, Frames 2099-2109.)
3362-3363	See Frames 3346-3351.
3364-3376	One table of index numbers of the products of the normal pressure synthesis. Analysis of the products is given. (Frames 3365-3376 are duplicates of Frame 3364.)

Frames

3377-3408A

These frames plus T.O.M. Reel 292, Frames 3408B-3424 make up complete report entitled "Carbon and heat balance for the Fischer-Ruhrchemie-Synthesis." Report is dated Nov. 9, 1938, Ruhrchemie A.G., Oberhausen-Holten and consists of graphs and tables.