

INDEX - T.O.M. REEL 290
(Original Designation FIAT Reel K-23
PB L70214)

Frames

- 1858-1865 Adsorptive power of the carrier substance of aromatization catalysts. (Adsorption measurements of butane on A-coal, silica gel, chromium oxide and aromatization catalysts at various pressures and temperatures.) Report signed by Rottig, dated Oct. 14, 1938, Ruhrchemie A.G., Oberhausen-Holten. (One diagr. and four pages of curves included.)
- 1866-1873 (Report and duplicate.) The final products of the conversion of heptane into isoheptane by means of aluminum bromide. Report signed by R. Scheibe, dated Sept. 13, 1938, Ruhrchemie A.G., Oberhausen-Holten. (One curve attached.)
- 1874-1884 Isomerization of n-hexane and n-octane under the influence of aluminum chloride. Translation into German of a Russian report by B.L.Moldawski, M.W.Kobilskaja, and C.E.Liwschiz. Translation is dated Sept. 8, 1938. (Four tables, 2 diags. and bibliog. incl.)
- 1885-1898 Report on catalysts K₁-K₈₇ for the aromatization of hydrocarbons. Report by Rottig, dated Aug. 30, 1938, Ruhrchemie A.G. (Report is also reproduced on T.O.M. Reel 296, Frames 7057-7076 together with a review.)
- 1899-1903 Examination of aromatized nonane. Report signed by R. Scheibe, Aug. 11, 1938, Ruhrchemie A.G., Oberhausen-Holten. (One table and one page of curves attached.)

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- 1904-1925 After-treatment of synthetic oil with granosil (bleaching earth.) Report signed by Clar, dated July 6, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Four pages of curves and nine pages of tables attached.)
- 1926-1929 Production of a stable oil by application of high temperatures in the synthesis. Report signed by Clar, dated June 23, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Two pages of tables attached.)
- 1930-1934 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, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Three tables attached.) (Reproduced also on T.O.M. Reel 296, Frames 6564-6568.)
- 1935-1941 Production of isopropyl and secondary butyl alcohol from gasoline on a semi-technical scale. Report signed by Schmitz, dated May 5, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Two pages of apparatus diags. attached.)
- 1942-1946 Experiments on the increase of the viscosity of easily distillable oils. Report signed by Clar, dated April 13, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Three pages of tables attached.)
- 1947-1948 Production of lubricating oils from Diesel oil. Report dated April 6, 1938, Ruhrchemie A.G., Oberhausen-Holten.
- 1949-1967 Aromatization of aliphatic hydrocarbons using iron-chromium catalysts. Report dated March 11, 1938, Ruhrchemie A.G., Oberhausen-Holten. (Eight pages of tables and eight pages of curves attached.)
- 1968-1979 Maximum yield of Diesel oil by cracking of pressure paraffin by Klamm-Kolling, Nov. 15, 1937.
- 1980-1983 Determination of the thermal stability of aviation oils according to the block method. Report signed by Clar, dated Oct. 5, 1937, Ruhrchemie A.G., Oberhausen-Holten. (One table, one diagr. and one photo. attached.)
- 1984-2003 Improvement of the thermal stability of synthetic oils by after-treatment with aluminum chloride. Report signed by Clar, dated Oct. 18, 1937, Ruhrchemie A.G., Oberhausen-Holten. (Ten pages of tables and two pages of curves attached.)

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- 2004-2011 Increase of the stability of lubricating oils in storage by means of beta-naphthylamine. Report signed by Clar, dated Dec. 14, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Three pages of tables and two pages of curves attached.) (Reproduced also on T.O.M. Reel 295, Frames 6516-6523.)
- 2012-2019 Catalytic cracking of Diesel oil. Report by Tramm, dated Nov. 17, 1939, Ruhrchemie A.G., Oberhausen-Holten. (One flow diagr. attached.)
- 2020 Reference to an unidentified synthesis of fatty acids. (Not complete.) Note by Tramm, dated Nov. 8, 1939, Ruhrchemie A.G., Oberhausen-Holten.
- 2021-2023 Preparation of a phosphoric acid polymerization catalyst. Report signed by Tramm, dated Sept. 19, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 296, Frames 6949-6951, and T.O.M. Reel 289, Frames 1565-1567.)
- 2024-2064 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, (29 pp. of graphs and curves, 6 pp. of diags. and 9 tables attached.) (Text of report is also reproduced on T.O.M. Reel 296, Frames 6952-6957 --- curves, graphs, tables and diags. are not included.)
- 2065-2068 Separation of the C₃ fraction from the C₄ fraction of gasol by means of a column for distillation under pressure. Report signed by Spiske, dated July 13, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Two diags. attached.)
- 2069-2076 Activity of aromatization catalysts using alumina as carrier substance. (Investigation is made of calcination temperature of Al₂O₃ and influence of alkali content of Al₂O₃ on activity.) (Three tables in the form of graphs are attached.) Report signed by Rottig, dated July 11, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 289, Frames 1780-1787 and T.O.M. Reel 296, Frames 6973-6980.)
- 2077-2079 Recovery of pure toluene from A.K. (active charcoal) gasoline. Report signed by Petri, dated July 14, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 289, Frames 1583-1585.)

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- 2080-2085 Report concerning research on aromatization of hydrocarbons in empty tubes to find best materials for reaction tubes. Report signed by Rottig, dated July 11, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.) (Reproduced also on T.O.M. Reel 289, Frames 1774-1779).
- 2086-2089 Endurance test for the aromatization of hydrocarbons with a catalyst (chromium oxide as activator). Report signed by Rottig dated June 7, 1939, Ruhrchemie A.G., Oberhausen-Holten.
- 2090-2091 Polymerization of condensation gasoline with an addition of water. Report signed by Spiske, dated June 12, 1939, Ruhrchemie A.G., Oberhausen-Holten. (One table and two graphs attached.)
- 2095-2098 Endurance test on the aromatization of hydrocarbons. (Toluene production.) Report signed by Rottig, dated May 26, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Two pages of curves attached.) (Reproduced also on T.O.M. Reel 297, Frames 7572-7575.)
- 2099-2109 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 291, Frames 3352-3361.)
- 2110-2136 Catalytic polymerization of unsaturated hydrocarbons (gasoline and gasol) under high pressure using solid phosphoric acid catalyst. (Report signed by Spiske and Franz, dated March 29, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Ten tables and seven pages of curves included.)
- 2137-2139 Report on the refining of polymer gasoline with granosil, its motor behavior, and potential gumming property of its mixture with active charcoal and "T.V.P." cracked gasoline. Report signed by Dahm, dated March 29, 1939, Ruhrchemie A.G., Oberhauser Holten. (Reproduced also on T.O.M. Reel 289, Frames 1568-1570.)
- 2140-2142 Synthesis of light hydrocarbons, especially C_2H_4 and C_3H_6 , from carbon monoxide and hydrogen in a catalyst even with a thin catalyst bed. Report signed by Dahm, dated Feb. 15, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 297, Frames 7593-7595.)
- 2143-2146 Refining of synthetic oils with sulfuric acid. Report signed by Clar, dated Feb. 21, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)

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- 2147-2148 Examination of an inhibitor to improve thermal stability of synthetic oils. Report signed by Clar, dated Feb. 27, 1939, Ruhrchemie A.G., Oberhausen-Holten.
- 2149-2151 Resistance to aging of unprocessed synthetic oils. (Prolongation of polymerization time has favorable effect on resistance to aging.) Report signed by Clar, dated Dec. 19, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two pages of tables attached.)
- 2152-2154 Dehydration of alcohols of water gas synthesis to olefins by treatment with phosphoric acid. Report by Tramm, dated Nov. 28, 1940, Ruhrchemie A.G., Oberhausen-Holten. (One diagr. attached.)
- 2155 Requisition of oil for test purposes. Note by Tramm, dated Dec. 27, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2156-2160 Conversion of a plant to the production of gasoline free from aromatic compounds. Report by Tramm, dated Nov. 20, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2161-2169 Laboratory experiments concerning the detrimental influence of steam on aromatizing catalysts. Report signed by Kolling, dated Nov. 18, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two pages of curves attached.) (Reproduced also on T.O.M. Reel 289, Frames 1619-1627 and T.O.M. Reel 296, Frames 7346-7354.)
- 2170-2174 Regeneration of spent catalyst of the oil synthesis. Report signed by Clar, dated Nov. 15, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.) (Duplicated on Frames 2178-2182).
- 2175 Yield of propylene in the production of gasoline. Note signed by Tramm, dated Dec. 19, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2176-2177 Process for refining fuel gas. (Removal of organic sulfur.) Report signed by Tramm, dated Dec. 20, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2178-2182 Duplicate of 2170-2174.
- 2183-2193 Increase of the oil yield from the primary products of the gasoline pressure synthesis. Report signed by Clar, dated Nov. 26, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Six pages of tables attached.) (Reproduced also on T.O.M. Reel 295, Frames 6459-6469.)
- 2194-2242 Inspection of French oil refineries. Report signed by Kolling, dated Oct. 11, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Twenty-nine pages of diagrs. and one page of diagr. explanations attached.)

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- 2243-2251 Abstracts from U.S. patents of Ruhrchemie. Report signed by Tramm, Nov. 8, 1940, Ruhrchemie A.B., Oberhausen-Holten.
- 2252-2276 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 attached and one photo missing.) (Reproduced also on T.O.M. Reel 296, Frames 7320-7345.)
- 2277-2292 Production of lubricating oils from primary products of the gasoline pressure synthesis. Report signed by Clar, dated Oct. 31, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Eight pages of tables attached.) (Reproduced also on T.O.M. Reel 295, Frames 6470-6485.)
- 2293-2294 Isopentane plant of the Compagnie Francaise de Raffinage, Gonfréville. Report dated Oct. 23, 1940, Ruhrchemie A.G., Oberhausen-Holten. (One flow diagr. attached.)
- 2295 Scheme for the increase of gasoline production. Report signed by Tramm, dated Oct. 8, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2296-2300A Influence of the temperature of decomposition of the catalyst on the activity in the aromatization. (Catalyst composition: alumina and chromium oxide.) Report signed by Rottig, dated Oct. 25, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two tables in the form of graphs attached.) (Reproduced also on T.O.M. Reel 289, Frames 1788-1793 and T.O.M. Reel 295, Frames 6165-6170.)
- 2301-2321 After-treatment of fractions of Dubbs cracked gasoline with boron phosphate and granosil. Report signed by Spiske, dated Oct. 7, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Three tables, one graph and seven pages of curves attached.) (Reproduced also on T.O.M. Reel 295, Frames 6171-6190.)
- 2322-2326 Production of synthetic oils with the index 120 from a C₆-C₇ mixture with higher boiling fractions of cracked gasoline. Report signed by Clar, dated Oct. 14, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Two tables attached.)
- 2327-2328 The influence of the capacity of the vessel and of the quantity used on the result of the oil distillation in a vacuum. Report signed by Clar, dated Oct. 16, 1940, Ruhrchemie A.G., Oberhausen-Holten. (One table included).
- 2329-2334 Production of oil stable against oxygen by addition of inhibitors before the synthesis. Report signed by Clar, dated Oct. 30, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Three tables attached.) (Reproduced also on T.O.M. Reel 295, Frames 6486-6491.)

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- 2335 Second after-treatment of aviation oil with aluminum chloride. Report by Clar, dated Oct. 24, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2336 Paraffins from the OXO synthesis of olefins. Report signed by Tramm, dated Oct. 16, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2337-2345 The addition of sulfuric acid to the olefins of cracked gasoline for ester production, the esters to be used for soaps or other washing agents. Report signed by Tramm and Rottig, dated Sept. 5, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2346-2349 Economic calculation for the production of sodium sulfonates from olefins of cracked gasoline. Report signed by Tramm, dated Sept. 4, 1940, Ruhrchemie A.G., Oberhausen-Holten. (One flow diagr. attached.)
- 2350-2356 Catalytic dehydrogenation of gaseous paraffin for the production of a high quality of gasoline. Translation into German of an article by A.V. Grosse, V.N. Ipatieff, Gustav Egloff and J.C. Morrell appearing in "National Petroleum News," Nov. 29, 1939, p. 520. (Seven tables attached.)
- 2357-2361 Test with olefins on the duration of polymerization with original Ipatieff catalyst and with phosphoric acid catalyst. Report signed by Spiske, dated Sept. 27, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Reproduced also on T.O.M. Reel 295, Frames 6191-6195.)
- 2362-2363 Alteration of the melting point of fuel mixtures, particularly polymer gasolines, by addition of aromatic compounds. Report signed by Spiske, dated Sept. 2, 1940, Ruhrchemie A.G., Oberhausen-Holten.
- 2364-2380 Production of an oil with a low viscosity and a low solidifying point. Production of an aviation oil by distilling residual oil. Report signed by Clar, dated Sept. 11, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Nine tables attached.)
- 2381-2391 Refinement of synthetic oils by means of sulfuric acid. Report signed by Clar, dated Aug. 25, 1939, Ruhrchemie A.G., Oberhausen-Holten. (Seven tables attached.)
- 2392-2412 Production of synthetic oils stable against oxygen by after-treatment with aluminum chloride and by sulfurization. Report signed by Clar, dated Aug. 20, 1940, Ruhrchemie A.G., Oberhausen-Holten. (Eight tables attached.) (Reproduced also on T.O.M. Reel 295, Frames 6495-6515.)

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- 2413-2416 Comparative calculation of various processing methods of primary products from the Fischer gasoline synthesis. Report signed by Tramm, dated Aug. 16, 1940; Ruhrchemie A.G., Oberhausen-Holtten. (Calculation figures on which this report is based are not attached.)
- 2417-2438 Various methods for the production of synthetic oils stable against oxygen. (Sulfur and aluminum chloride best inhibitors.) Report signed by Clar, dated Aug. 23, 1940, Ruhrchemie A.G., Oberhausen-Holtten. (Ten tables attached.)
- 2439-2457A Catalytic cracking of crude oil for the preferable production of light fuel oil. The Houdry Process. Translation into German of an article written by H.G. van Voorhis in "National Petroleum News," Aug. 1939, p. 356. (Two flow-diagrams attached.)
- 2458-2460 These frames plus T.O.M. Reel 291, Frames 2461-2469 make up complete report on the flow resistance of aromatization catalysts. Report signed by Kolling, dated July 2, 1940, Ruhrchemie A.G., Oberhausen-Holtten. (Seven diagrams attached.) (Text of report is also reproduced on T.O.M. Reel 297, Frames 7526-7530 and again on Frames 7531-7535 with one diagram appearing on Frame 7536.)