

INDEX - T.O.M. REEL 288
(Original Designation FIAT Reel K-21)
PB L70212

Documents taken from Ruhrchemie A.G., Oberhausen, Germany.

Frames

- 570-574 The effect of oxygen in the refining process in gasoline production. Report by Seifert, dated Nov. 24, 1937. (Note of transmittal dated Dec. 14, 1937 precedes report and one graph follows report.)
- 575-576 Desulfurization of synthesis gases. Reports by Roelen and Kalk, dated Dec. 11, 1937 and Dec. 17, 1937.
- 577-582 Kuhlmann's substance for refining. Report by Roelen, dated Nov. 15, 1937. (One table and four graphs attached.)
- 583-585 Report of the Ruhrbenzin plant conference on Oct. 26, 1937.
- 586-588 The effect of the purity of the gas on the gas reaction. Report by Feisst, dated Oct. 20, 1937. (One page of curves attached.)
- 589-591 The effect of the refining substance on the composition of the synthesis gas. Report dated Sept. 28, 1937. (Report consists of three tables.)
- 592-594 These frames are missing.
- 595-597 The "Lux" substance in the Fischer gasoline synthesis. Report dated Mar. 31, 1937. (Two analysis tables attached.) (Duplicate of text of report and one table appear on Frames 604 and 605.)
- 598-602 Investigation of purification substances. Report by Feisst, dated June 9, 1937. (One graph and data sheet attached.)
- 603 This frame is missing.
- 604-605 See Frames 595-597.

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- 606-607 Low-temperature separation of oil-aldehyde mixtures containing cobalt and iron. Report by Landgraf, dated Apr. 6, 1940.
- 608-609 Cracked oil for alcohol synthesis. Report by Landgraf, dated Apr. 29, 1940. (One graph attached.)
- 610-613 Amendment of the directions for synthesizing aldehydes by means of suspended catalyst. Report by Roelen, dated Apr. 23, 1940. (Duplicate of report appears on Frames 612-613.)
- 614-620 OXO synthesis. Report by Roelen, dated Jan. 18, 1940. (Four flow diags. attached.) (Report is duplicated on Frames 655-661.)
- 621-631 Ruhrchemie's alcohols and fatty acids. Report by Mannes, dated Mar. 16, 1940. (See also reports appearing on Frames 662-663 and 668-673.)
- 632-634 These frames are missing.
- 635 The present state of the methanol experiments. Report by Roelen, dated Aug. 17, 1943.
- 636-642 The synthesis of aldehydes and other compounds containing oxygen, starting with carbon monoxide and hydrogen. Report by Roelen, dated Feb. 14, 1940.
- 643-644 Aliphatic alcohols. Report by Roelen, dated Feb. 8, 1940. (One diag. attached.)
- 645-646 Aldehyde synthesis. Report by Roelen, dated Feb. 5, 1940.
- 647-648 These frames are a duplication of the preceding item.
- 649-654 The utilization of the OXO reaction--conference of Ruhrchemie, I.G. Farben and Henkel representatives held in Munich on Feb. 29, 1940. Conference report by Ambros.
- 655-661 Duplicate of report on Frames 614-620.
- 662-663 Ruhrchemie's alcohols and fatty acids. Report dated Jan. 29, 1940. (See also reports appearing on Frames 621-631 and 668-673.)
- 664-666 Physical constants and boiling behavior of an alcohol hydrocarbon mixture "H. ." Report by Mannes, dated Feb. 7, 1940.
- 667 Report on the fractional distillation of synthetic alcohols mixed with hydrocarbons. Report by Hirth dated Feb. 7, 1940. (Report consists of one table.)

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- 668-673 Alcohols and fatty acids from Ruhrchemie. Report dated Jan. 29, 1940. (See also reports appearing on Frames 621-631 and 662-663.)
- 674-676 Addition of water gas to gas oils. Report by Roelen, dated Feb. 17, 1939. (One flow diagr. attached.)
- 677-680 Conference on a continuous toluene-producing process. Report by Roelen, dated Feb. 10, 1939.
- 681-683 Reduction of metal oxide catalysts. Report by Roelen, dated Mar. 14, 1941.
- 684-691 The effect of reduction and of the type of kieselguhr on the catalytic efficiency. Report by Heckel, dated Sept. 8, 1938. (Five graphs attached.) (Report is duplicated on Frames 1032-1039 and is also reproduced on T.O.M. Reel 287, Frames 377-384 and T.O.M. Reel 296, Frames 7040-7047.)
- 692-698 Series of short reports by von Asboth, Heckel and Roelen on the methanization and removal of carbonic acid from reduction hydrogen. Reports are dated during May and June 1938.
- 699-700 Reducibility of cobalt catalysts depending on the proportion of kieselguhr. Report signed by Schenk, dated May 12, 1938. (One curve sheet attached.) (Report is also reproduced on T.O.M. Reel 296, Frames 7134-7135.)
- 701 Short report on the reduction of magnesia catalysts. Report by Gehrke, dated Mar. 8, 1938.
- 702 Insignificant letter.
- 703 The carbon dioxide content of thorium and magnesium catalysts. Report by Schenk, dated Feb. 15, 1938. (Report is also reproduced on T.O.M. Reel 296, Frame 7184.)
- 704 Duplicate of Frame 703.
- 705-707 Thorium-magnesium thread-grain catalyst reduced in continuous process. Report by Schenk, dated Feb. 1, 1938. (Report is also reproduced on T.O.M. Reel 287, Frames 44-46.)
- 708-724 Reduction furnace. Two-page report by Roelen dated Dec. 4, 1937 and two-page report by Sauter dated Oct. 28, 1937 with page of diagrs. attached. (Six duplicates of Roelen report follow Sauter report.)
- 725 Incomplete reduction of catalysts. Short report by Roelen, dated Nov. 9, 1937.

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- 726-727 Further oxidation of catalysts. Report by Heckel, dated Nov. 5, 1937. (One page of graphs attached.)
- 728-737 Reduction of cobalt catalysts under lowered pressure. Report by Rummel, dated Oct. 25, 1937. (One diagr. three graphs and three tables attached.)
- 738-742 Micro-determination of nitric oxide in the reduction process of the catalyst factory. Report is dated July 6, 1937. (One graph and short handwritten note attached.)
- 743-749 Micro-determination of gases in the reduction process. Report is dated May 28, 1937. (Two tables and one graph attached.)
- 750-750B Plant report on catalyst reduction, Feb.-May 1937. Report by Johswich, dated May 20, 1937.
- 751-752 Soaking experiments. Report by Johswich, dated Apr. 22, 1937.
- 753-761 Catalyst reduction experiments. Report by Schuff, dated Apr. 5, 1937. (Three tables, three graphs and one diagr. attached.)
- 762-765 New catalyst reductions. Report by Roelen, dated Mar. 22, 1937. (One diagr. attached.) (Duplicate of report appears on Frames 772-775).
- 766-771 Hardness of the catalyst grain. Effect of the reduction. Report by Lochmann, dated Mar. 25, 1937. (One table, one graph and one diagr. attached.) (Report is duplicated on Frames 970-975.)
- 772-775 Duplicate of report on Frames 762-765.
- 776-778 Reduction of catalysts. Report by Roelen, dated Mar. 11, 1937. (Report is duplicated on Frames 1019-1021.)
- 779-785 Continuous reduction in a transverse flow shaft furnace. Report by Roelen, dated Mar. 3, 1937. (Two diagsr. attached.)
- 786-791 Catalyst reduction, Sept. 1936-Jan. 1937. Report is dated Jan. 19, 1937.
- 792-801 Reduction with hydrogen containing a foreign gas. Part 4. Report by Roelen, dated Apr. 30, 1937. (Five graphs and three tables attached.)
- 802 Reduction. Report by Roelen, dated Apr. 17, 1937.

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- 803-805 Reduction with hydrogen containing a foreign gas. Part 3. Report by Roelen, dated Apr. 16, 1937. (One table and one graph attached.)
- 806-807 Process for the recovery of thorium from the used catalyst of the carbon monoxide hydrogenation German Pat. Appl. R 102,874 IVb/12 m, dated July 1, 1938
- 808-809 Report of conference on thorium regeneration at Schwarzheide on Feb. 24, 1939. Report by Laube, dated Feb. 28, 1939
- 810 Thorium regeneration. Short report signed by Roelen and dated Feb. 15, 1939.
- 811-819 Regeneration of thorium from thorium catalyst sludge at Brabag, Schwarzheide. Two reports by Buchner dated Jan. 24, 1939 and Dec. 19, 1938. Note of transmittal signed by Roelen, dated Feb. 1, 1939, precedes reports. (Reports and note are also reproduced on T.O.M. Reel 296, Frames 6995-7004.)
- 820-827 Working up of iron-thorium sludge at Auer-Gesellschaft, Oranienburg. Three reports concerning a meeting between Auer-Gesellschaft and Braunkohle-Benzin A.G. at Oranienburg on Nov. 14, 1938. Reports are signed by Kaden and Wagner (dated Nov. 17, 1938), Klein (dated Nov. 17, 1938) and Roelen (dated Nov. 21, 1938).
- 828-832 Removal of organic substances in thorium regeneration. Report by Buchner, dated Nov. 21, 1938. (Four graphs attached.)
- 833-839 Report of a conference between Ruhrchemie, Holten and Auer, Oranienburg, on Oct. 24, 1938, concerning the working up of thorium sludge and supplementary report concerning the working up of iron-thorium sludge. Both reports are dated Nov. 2, 1938, Oranienburg.
- 840 Note to Auer-Gesellschaft concerning the conference on Oct. 24, 1938 regarding the working up of thorium sludge. Note is signed by Alberts, dated Oct. 22, 1938, Ruhrbenzin A.G.
- 841-845 Recovery of thorium from the thorium catalyst sludge. Improved sulfate process. Report by Buchner and Roelen, dated Oct. 22, 1938. (One flow diagr. and one graph attached.) (Report is duplicated on Frames 846-850 and also reproduced on T.O.M. Reel 296, Frames 7032-7036.)
- 846-850 Duplicate of Frames 841-845.
- 851 Short note from Ruhrchemie to Auergesellschaft on the working up of thorium sludge. Note is dated Oct. 14, 1938 and signed by Waibel.

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- 852-856 Report of a conference on Oct. 6, 1938 in Holten concerning thorium regeneration. Report by Heckel, dated Oct. 10, 1938. (Report is also reproduced on T.O.M. Reel 287, Frames 24-31.)
- 857-864 These frames include three copies of thorium analyses A and B by Buchner, one graph concerning the precipitation of thorium by potassium sulfate, and three copies of a note of transmittal dated Oct. 6, 1938. (The graph has also been reproduced in the report appearing on Frames 841-845 and the thorium analyses have also been reproduced in the report appearing on T.O.M. Reel 287, Frames 24-31.)
- 865-866 Two short notes dated Oct. 1, 1938 concerning correspondence between Brabag, Auer-Gesellschaft and Ruhrchemie.
- 867-869 Purification of thorium from Auer-Gesellschaft. Report by Heckel, dated Sept. 30, 1938. (One table and one graph attached.) (Reproduction of this document is included in report appearing on T.O.M. Reel 287, Frames 24-31.)
- 870-871 Correspondence from Ruhrchemie to Braunkohle-Benzin A.G. concerning thorium regeneration, dated Sept. 30, 1938 and signed by Alberts.
- 872-873 Thorium analysis. Report by Roelen dated Sept. 22, 1938.
- 874-876 Thorium regeneration. Conference report signed by Roelen, dated July 18, 1938.
- 877-878 Large-scale tests on thorium regeneration from precipitation sludge by means of potassium sulfate. Report by Buchner, dated July 16, 1938.
- 879 Composition of iron-thorium sludge. Analysis report by Buchner, dated June 27, 1938.
- 880-884 Regeneration of thorium from the precipitation sludge according to the sulfate process. Report by Buchner, dated May 14, 1938. (One diagr. attached.) (More complete report which also includes one table appears on T.O.M. Reel 287, Frames 74-79.)
- 885-887 Thorium regeneration. Conference report by Heckel, dated May 6, 1938.
- 888-890 Method for the determination of the quality of thorium. Report dated Nov. 10, 1937, Oranienburg.
- 891-892 Solubility of thorium sulfate in diluted sulfuric acid. Report by Buchner, dated Apr. 10, 1937. (One graph attached.)

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- 893-898 Production of catalysts for the synthesis. German Pat. Appl. V 40,188 IVd/12 p. By Voos. No date. (Two pages of handwritten notes attached.)
- 899-900 Testing and production of iron catalysts. Conference report by Lemke, dated Mar. 15, 1944.
- 901 Manganometric determination of free iron in reduced catalysts. Report dated Mar. 14, 1944, Lurgi, Frankfurt am Main.
- 902-903 These frames are missing.
- 904-905 Alkalization of iron catalysts. Report by Heckel concerning Ruhrchemie Patent Appl. R 506, dated Apr. 30, 1942.
- 906-908 Cobalt catalysts containing nickel. Report by Roelen, dated Sept. 24, 1941.
- 909-910 Medium pressure synthesis. Report by Schenk. (First page of report is missing.)
- 911-913 Compressed cobalt catalysts. Report by Schenk, dated July 18, 1941. (Report is duplicated on Frames 1116-1118.)
- 914-917 The use of nickel catalysts and mixed nickel-cobalt catalysts for gasoline synthesis. Report by Heckel, dated Apr. 4, 1941. (One table attached.) (Report is also reproduced on T.O.M. Reel 296, Frames 7316-7319.)
- 918-922 Paraffin synthesis by means of an iron catalyst. Report by Heckel, dated Mar. 3, 1941.
- 923-925 Catalyst hardness. Influence of the condition of kieselguhr on the stability of the catalyst. Conference report by Heckel, dated Sept. 12, 1939. (Report is also reproduced on T.O.M. Reel 287, Frames 337-339.)
- 926-927 Iron-calcium catalysts. Report by Roelen, dated June 7, 1939.
- 928-929 Modification of the hardness of cobalt catalyst. Report by Heckel, dated Apr. 28, 1939. (Report is also reproduced on T.O.M. Reel 296, Frames 6989-6990.)
- 930-931 Test examples for the paraffin synthesis. Report by Heckel and Landgraf, dated Mar. 31, 1939. (Report is duplicated on Frames 1001-1002.)
- 932-933 Catalyst obtained by decomposition of cobalt salt solutions. Report by Johswich, dated Aug. 4, 1938.

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- 934-946C Determination of trivalent cobalt in cobalt catalysts. Report by Roelen, dated July 2, 1938. (One diagr., ten handwritten graphs and tables, and one large table attached.) (Report, excluding the large table, is also reproduced as attachments to report appearing on T.O.M. Reel 296, Frames 7095-7108.)
- 947-949 Subsequent treatment of finished grain. Report by Roelen, dated June 3, 1938.
- 950-953 Magnesia samples for catalyst production. Report by Heckel, dated May 14, 1938. (Two tables and two graphs attached.)
- 954-957 Compression catalysts. Report by Heckel, dated Jan. 28, 1938. (Two graphs attached.) (Report is also reproduced on T.O.M. Reel 296, Frames 7185-7188.)
- 958-961 Improving grain hardness. Conference report by Heckel, dated Jan. 26, 1938.
- 962 Mixed thorium-magnesium catalysts. Report by Gehrke, dated Jan. 25, 1938.
- 963-964 Examination of exhausted catalysts. Report by Roelen, dated Nov. 27, 1937.
- 965-966 Production of catalysts containing magnesium. Report by Roelen, dated Nov. 19, 1937. (Report is also reproduced on T.O.M. Reel 292, Frames 3827-3828.)
- 967-969 Results with cobalt catalysts containing nickel. Report by Roelen, dated Apr. 2, 1937. (Two pages of tables attached.) (Report is also reproduced on T.O.M. Reel 287, Frames 89-91.)
- 970-975 Duplicate of report on Frames 766-771
- 976-982 Proportions of cobalt, thorium and kieselguhr in the catalyst. Report by Heckel, dated Mar. 17, 1937. (One graph and two tables attached.)
- 983-989 Control of preliminary precipitation by measuring the pH. Report by Lochmann, dated June 16, 1936. (Two graphs attached.)
- 990-991 Diesel oil mixing experiments. Report by Lochmann, dated Apr. 30, 1938.
- 992-995 Residue oil from ozonization. Report by Roelen, dated May 23, 1938. (Frames 994-995 are duplicates of Frames 992-993.)

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- 996 Flocculation and solidification points of "RCH" Diesel oil. Short report by Lochmann, dated May 18, 1938.
- 997-1000 Paraffin synthesis. Report by Roelen, dated Dec. 19, 1939. (Report is also reproduced on T.O.M. Reel 296, Frames 6941-6944.)
- 1001-1002 Duplicate of report on Frames 930-931.
- 1003-1004 Increased paraffin formation. Report by Roelen, dated Mar. 13, 1939.
- 1005-1006 Hard paraffin conversion. Report by Roelen, dated Jan. 3, 1939.
- 1007-1008 Paraffin production. Report by Roelen, dated Jan. 11, 1939.
- 1009-1011 Reduction of cobalt catalysts. Report by Roelen, dated Jan. 4, 1938.
- 1012-1013 Reduction value determination with $\frac{n}{2}$ AgNO₃ solution. Report by Buchner, dated June 15, 1937.
- 1014 Speed of reduction. Report by Roelen, dated June 11, 1937.
- 1015-1018 Influences on the course of reduction. Report by Roelen, dated June 8, 1937. (Three graphs attached.)
- 1019-1021 Duplicate of report on Frames 776-778.
- 1022-1024 Experiments in a small reduction apparatus. Report by Roelen, dated Feb. 18, 1937. (One table attached.)
- 1025-1026 Reduction at reduced pressure. Report by Roelen, dated July 1, 1937.
- 1027-1031 Technical problems in catalyst production. Conference report by Johswich, dated Sept. 29, 1938.
- 1032-1039 Duplicate of report on Frames 684-691.
- 1040 Rules for the analytical properties of "Kieselgur 120" of Aug. 1938. By Roelen. (This document is reproduced with reports found on T.O.M. Reel 296, Frames 7082-7086, and also on T.O.M. Reel 287, Frame 92.)
- 1041-1044 Alkali resistance of kieselguhrs. Report by Roelen, dated Aug. 3, 1938. (One graph and one table attached.) (Report is also reproduced on T.O.M. Reel 296, Frames 7087-7090. Graph and table are also reproduced on T.O.M. Reel 287, Frames 22-23.)
- 1045-1046 Kieselguhr. Report by Roelen, dated Aug. 3, 1938.

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- 1047-1049 Investigation of kieselguhrs from Schwindebeck G.m.b.H. Report by Heckel, dated July 2, 1938.
- 1050-1051 Results of the testing of the activity of kieselguhrs. Report by Heckel, dated June 1, 1938. (Report consists of one table.)
- 1052-1061 Investigation of kieselguhrs. Report by Roelen, dated Mar. 29, 1938. (Six tables attached.)
- 1062-1063 Calcining drum for kieselguhr. Report dated Dec. 20, 1937.
- 1064-1075 Tests of kieselguhr samples. Report by Heckel, dated Nov. 24, 1937. (Two tables and two graphs attached.) (Part of report is also reproduced on T.O.M. Reel 287, Frames 103-108.)
- 1076-1092 Diesel and fuel oil from lignite tar oils. Report No. 2 by Lochmann, dated Oct. 24, 1938. (Eleven handwritten tables and one diagr. attached.)
- 1093-1097 Method to obtain chiefly paraffin in the hydrogenation of carbon monoxide. Patent application dated Jan. 4, 1940.
- 1098-1107A The development of cobalt catalysts. (Five data sheets dated during July 1944 attached.)
- 1108-1115 Wet synthesis. Report by Schenk, dated Jan. 20, 1942. (Report is also reproduced on T.O.M. Reel 289, Frames 1242-1249.)
- 1116-1118 Duplicate of report on Frames 911-913.
- 1119-1121 Cobalt-nickel catalysts. Report by Schenk, dated July 22, 1941. (Report is also included in the reports reproduced on T.O.M. Reel 296, Frames 7302-7307.)
- 1121A-1122 One diagr. and table by Schenk, dated Jan. 15, 1942, concerning compressors.
- 1123-1129 Paraffin synthesis by means of an iron catalyst. Report by Heckel, dated Mar. 3, 1941.
- 1130-1139 Production of coal gas from waste gas of a gasoline synthesis with iron catalyst. Report by Roelen, dated Mar. 24, 1941. (Seven tables attached.)
- 1140-1143 Oxosynthesis, particularly for producing propyl aldehyde. Report by Roelen, dated Nov. 27, 1941. (Rough draft of report, dated Nov. 26, 1941, is reproduced on T.O.M. Reel 289, Frames 1267-1270.)

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- 1144-1146 Frames include one graph showing the boiling range of the products obtained over an iron catalyst, one graph entitled "Water gas cycle synthesis over iron catalyst" and one table entitled "Low-temperature iron synthesis" dated Mar. 3, 1942.
- 1147-1149 Iron catalyst, Schwarzheide. Report by Alberts. dated Dec. 22, 1941.
- 1150-1153 Iron catalysts for the hydrocarbon synthesis--status of January 1943. Report by Roelen, dated Jan. 28, 1943.
- 1154-1155 Improvements in the operation of a Fischer-Tropsch gasoline plant at Ruhrchemie. Report by Lopmann, dated Apr. 17, 1942.
- 1156-1169 Conference on the synthesis operation held on March 26, 1943 at the Chemische Werke Essener-Steinkohle in Bergkamen. Conference report is signed by Feisst.