"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

L 26110-65 EWT(m)/EWF(j)/EWP(j) Pc-4/Pr-4 RM

ACCESSION NR: AP5002921 S/0138/65/000/001/0012/0014

AUTHOR: Kovalev, N. F., Korotkov, A. A., Reykh, V. N.

TITLE: A method for preparing rubber based on SKI-3 which prevents the degradation of polymer chains during rubber processing

SOURCE: Kauchuk i rezina, no. 1, 1965, 12-14

TOPIC TAGS: rubber production, polymer degradation, synthetic rubber, polyisoprene, vulcanization, rubber mechanical property SKI-3 rubber

ABSTRACT: A method for preparing rubber mixes and vulcanizates from synthetic polyisoprene SKI-3 without causing degradation or decreases in molecular weight was developed. The cut sample (20-30g) and a benzene-insoluble activator were placed into a stainless steel cell equipped with a blade impeller (35-46 rpm), evacuated 3-4 times and purged with argon, and mixed with 400-500 wt.% benzene distilled in an argon atmosphere; vulcanizing agent, accelerator and plasticizer were added, the polymer was allowed to swell for 2-3 days, mixed 20-30 minutes and dried under decreased pressure with purging by argon. The molecular weight of samples prepared by this method was virtually unchanged, whereas that of milled

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L 26110-65

ACCESSION NR: AP5002921

samples decreased markedly. A mixture of 100 g polymer, 1 g sulfur, 0.6 g Altax, 3 g diphenylguanidine, 5 g zinc oxide and 1 g stearic acid vulcanized in 15-30 minutes at 134C. The tensile strength of specimens with high molecular weight (688,700) and an intrinsic viscosity higher than 3 decreased markedly when they were vulcanized after pressing in the form instead of being passed 2-4 times through a laboratory calender with a 0.7-0.75 mm mesh before vulcanization. Therefore, the latter method was used on specimens subjected to tests for tensile strength and relative elongation, while elasticity was determined after pressing in the cold form for 1 hour before vulcanization. Orig. art. has: 1 figure and 3 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva (All-Union Synthetic Rubber Scientific Research Institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 005 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

2

L 44582-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6015674 (A) SOURCE CODE: UR/0413/66/000/009/0077/0077 36 B

INVENTOR: Sadykh-zade, S. I.; Sultanov, N. T.; Aliyeva, M. A.; Akhmedova, G. G.; Radchenko, I. I.; Reykh, B. N.; Krchmarek, V. V.

ORG: none

TITLE: Method for obtaining synthetic rubber. Class 39, No. 181295 [announced by Institute of Petrochemical Processes, AN Azerbaydzhan SSR (Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 77

TOPIC TAGS: synthetic rubber, butadiene styrene rubber, copolymerization, polymerization initiator

ABSTRACT: An Author Certificate has been issued for a method of obtaining synthetic rubber by water-emulsion copolymerization of butadiene with styrene in an alkaline medium in the presence of conventional initiators, buffers, emulsifiers, and regulators. To improve the physical and mechanical properties of the rubber, the copolymerization

UDC: 678.762.2-139

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L 44582-66

ACC NR: AP6015674

is carried out in the presence of methyl α,β-dichloroisobutyrate as the third comonomer for butadiene. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 04Jun65/

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

ACC NR: AP7000909 (A) SOURCE CODE: UR/0138/66/000/012/0002/0005

AUTHOR: Kovalev, N. F.; Korotkov, A. A.; Petrov, G. N.; Reykh, V. N.; Lisochkin, G. F.; Dugina, L. V.; Eventova, L. A.

ORG: All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)

TITLE: Preparation and properties of butadiene-isoprene block polymers

SOURCE: Kauchuk i rezina, no. 12, 1966, 2-5

TOPIC TAGS: butadiene, isoprene, block copolymer, polymer physical property

ABSTRACT: A method was developed for preparing butadiene-isoprene block polymers in sufficient quantities to study their basic physicomechanical properties. The block polymerization was carried out in a 50% isopentane solution in the presence of an organolithium catalyst, and the properties of the polymers were studied as functions of the monomer ratio and quantity of blocks in the polymer chain. From the standpoint of microstructure, the blocks of polyisoprene and polybutadiene are practically analogous to mixtures of isoprene-butadiene homopolymers obtained on the organolithium catalyst. From the standpoint of the properties of the vulcanizates, the synthesized block polymers practically do not differ from the properties of mechanical mixtures of the homopolymers and are entirely determined by the butadiene-to-isoprene ratio.

UDC: (678.762.2+678.762.3):678.028.24.004.12

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

ACC NR: AP7000909

Orig. art. has: 6 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 22Feb66/ ORIG REF: 002

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

L 44587-66 EWT(m)/T/EWP(j) IJP(c) WW/RM

ACC NR: AP6015665 (A) SOURCE CODE: UR/0413/66/000/009/0074/0074

33
B

INVENTOR: Livshits, I. A.; Nerush, K. U.; Reykh, V. N.; Ryazantsev, K. P.; Salnis, K. Yu.; Stepanova, V. I.; Shlifer, D. I.

ORG: none

TITLE: Preparation of ethylene-propylene rubber. Class 39, No. 181285

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 74

TOPIC TAGS: rubber, ethylene propylene rubber, copolymerization

ABSTRACT: This Author Certificate introduces a method of preparing ethylene-propylene rubber by copolymerization of ethylene with propylene in an organic solvent at a temperature below 30C in the presence of a complex catalyst consisting of organometallic compounds of the I—III groups and salts of metals of variable valence of the IV--VIII groups. To extend the variety of organic solvents, chlorinated aliphatic hydrocarbons such as carbon tetrachchloride, methylene chloride, dechloroethane, or ethyl chloride are suggested. [Translation] [LD]

SUB CODE: 11/ SUBM DATE: 24Oct60/

Card 1/1 UDC: 678.742.2-134.23

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

L 4090-66 EWT(m)/EPF(c)/EWP(j) RM

ACC NR: AP5026777 SOURCE CODE: UR/0286/65/000/017/0067/0067

INVENTOR: Zimin, E. V.; Reykh, V. N.; Borisova, T. A.; Yurina, N. G.

ORG: none

TITLE: Vulcanization of carboxylated rubbers. Class 39, No. 174353 [announced by All-Union Scientific Research Institute of Synthetic Rubber im. Academician S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 67

TOPIC TAGS: synthetic rubber, carboxylated rubber, vulcanization, calcium aluminate

ABSTRACT: An Author Certificate has been issued for a method for vulcanizing carboxylated rubbers with metal compounds. To reduce the tendency of rubber mixtures to premature vulcanization, calcium aluminates, alone or in combination with other vulcanizing agents (peroxides, sulfur), are used as the metal compounds. [BO]

SUB CODE: MT, GC/ SUBM DATE: 12May64/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4128

BVK

Card 1/1 UDC: 678.744.33-139
678.028.293

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

KOVALEV, N.F.; KOROTKOV, A.A.; REYKH, V.N.

Method for the production of rubber on a base of SKI-3 eliminating the destruction of polymeric chains during the processing of natural rubber. Kauch.i rez. 24 no.1:12-14 Ja '65.

(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V.Lebedeva.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

LIVSHITS, I.A.; REYKH, V.N.; SALNIS, K.Yu.; SORKINA, F.M.; Prinimala uchastiye DOLINSKAYA, E.R.

Properties of chlorinated ethylene-propylene copolymers. Kauch. i rez. 22 no.5:11-13 My '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V.Lebedeva.
(Ethylene polymers) (Propene) (Rubber, Synthetic--Testing)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

LIVSHITS, I.A.; IL'INA, S.I.; [illegible]EYKH, V.N.

Polymerization of butadiene, piperylene, and styrene mixtures. Kauch. i rez. 20 no.8:1-3 Ag '61. (MIRA 14:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni S.V. Lebedeva.
(Butadiene) (Piperylene)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKH, V.N.; SALNIS, K. Yu.; SAMOLETOVA, V.V.; IVANOVA, L.S.; MIKHAYLOVA, S.A.

Vulcanization of ethylene and propylene copolymers. Kauch.i rez. 20 no.6:1-5 Je '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva.
(Ethylene) (Propene)
(Vulcanization)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

LIVSHITS, I.A.; IL'INA, S.I.; REYKH, V.N.

Polymerization of butadiene and piperylene mixtures. Kauch.i rez. 20 no.7:1-4 Jl '61. (MIRA 14:6)

1. Veseoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni S.V.Lebedeva.
(Butadiene) (Piperylene) (Polymerization)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

30200
S/080/61/034/011/013/020
D228/D301

15 9300

AUTHORS: Yakubchik, A.I., Reykh, V.N., Tikhomirov, B.I., and Pavlikova, A.V.

TITLE: Influence of hydrogenation on the properties of polybutadienes

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 11, 1961, 2501 - 2507

TEXT: The authors studied the influence of hydrogenation on some physico-mechanical properties of sodium-polybutadiene (I) and cis-1,4-polybutadiene (II): modulus of stretching, tensile strength, specific elongation, hardness, recoil elasticity, grindability, temperature of brittleness, frost-resistance coefficient, and gas permeability. Previous work by A.I. Yakubchik et al. has shown that the hydrogenation of such compounds gives both products with commensurate amounts of hydrogenated and unhydrogenated rings and polymers with predominantly hydrogenated rings; the properties of the obtained hydropolybutadienes depend on the original polymer's

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Influence of hydrogenation on the ...

structure. A.I. Yakubchik's method (Ref. 4: Zh. prikl. khimii, 34, 652, 1961) was followed in the hydrogenation of I and in preparing vulcanized rubbers with different microstructures and degrees of unsaturation. The procedure developed by the same author (Ref. 5: Zh. prikl. khimii, 34, 942, 1961) was used to obtain similar specimens - which possessed marked crystallinity - from the hydrogenation products of II. It is concluded from the experimental data that the tensile strength and specific elongation of the vulcanized rubbers obtained from the hydrogenation of I are at a minimum when the degree of unsaturation is decreased by approximately twofold. The decrease of this latter also results in their increased hardness and resistance to heat-ageing and in their diminished brittleness-temperature, gas-permeability, and elasticity; this reduction of the chain elasticity is believed to be caused by the lessened number of double bonds in the chains and by the conversion of side-chain vinyl groups into ethyl groups. The degree of regulation in the polymer chains appears to influence favorably the rubbers' specific-elongation and tensile-strength, even in those cases when it does not lead to crystallization. The increased

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Influence of hydrogenation on the ... S/080/61/034/011/013/020
D228/D301

frost-resistance of the rubbers is considered to be due to the decrease of the inter-chain reaction in polymers with a small degree of unsaturation - and hence to be related to the "internal platification" effect. For the hydrogenation products of II the elasticity of vulcanized rubbers likewise decreases as the degree of unsaturation diminishes, but their hardness becomes greater. The rise in the temperature of vitrification, which was determined by Mareyev's method [Abstractor's note: No reference given], is connected with the increased rigidity of the polymer chains. There are 3 figures, 4 tables and 10 references: 8 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: J.D. D'Ianni, Ind. Eng. Chem. 40, 253, 1948; L. Kraus, Rubb. and Plast. Age 38, 880, 1957.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet i Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva (Leningrad State University and the All-Union Synthetic Rubber Research Institute im. S.V. Lebedev)

SUBMITTED: June 22, 1961

Card 3/3

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

28038 S/081/61/000/015/127/139
B102/B101

15 9201

AUTHORS: Reykh, V. N., Dolgoplosk, B. A., Tinyakova, Ye. I., Kalaus, A. Ye.

TITLE: Properties of carboxyl-containing rubbers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1961, 600, abstract 15Г354 (Sb. "Vulkanizatsiya rezin i izdeliy". Yaroslavl', 1960, 43 - 55)

TEXT: Results of preliminary tests of butadiene styrene СК-1-30(SK-1-30) divinyl and isoprene rubbers with additions of methacrylic acid are given. Rubbers from SK-1-30 surpassed the rubbers from СКС-30 (SKS-30A) with respect to stability to pure-gum mixtures, thermal stability, resistance to thermal aging, widening of cuts, wear, and with respect to elasticity. Carboxyl-containing isoprene rubber shows the least heat release on repeated deformation. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

LIVSHITS, I.A.; REYKH, V.N.; RYAZANTSEV, K.P.; SALNIS, K.Yu.; SAMOLETOVA, V.V.; STEPANOVA, V.I.; SHLIFER, D.I.; Prinimila uchastiye IVANOVA, L.S.

Properties of ethylene - propylene copolymers. Kauch. i rez. 19 no. 11:1-5 N '60. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva.
(Ethylene) (Propene) (Rubber, Synthetic)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKH, V.N.; SAMOLETOVA, V.V.; BARANOVA, G.P.; IVANOVA, L.S.

Properties of butadiene rubbers of regular structure, and their vulcanization. Kauch.i rez. 19 no.10:6-12 O '60. (MIRA 13:10)
(Butadiene) (Vulcanization)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKH, V. N.

"Novye tipy kauchuka, razrabatyvayemye v Sovetskom Soyuze."

report submitted for 35th Intl Cong, Industrial Chemistry, Warsaw, 15-19 Sep 64.

Vsesoyuzyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedev, Leningrad.

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83846

S/138/60/000/003/001/007
A051/A029

15.9200 also 2209

AUTHORS: Reykh, V.N.; Samoletova, V.V.; Ivanova, L.S.; Feringer, D.P.; Kormer, V.A.

TITLE: The Properties of СКИ-3 (SKI-3), a New Synthetic Isoprene Rubber

PERIODICAL: Kauchuk i Rezina, 1960, No. 3, pp. 1 - 5

TEXT: The author states that in the last decade synthetic rubber of high elasticity was produced both by the USSR and the USA. A list of some of the types which were synthesized is submitted (Refs. 1 - 7). It is pointed out that all isoprene rubbers correspond to some degree to natural rubber, depending on the nature of the catalyst and the polymerization method. SKI-3 was synthesized in the USSR in 1957 - 1958. SKI-3 obtained with a complex modified catalysts was shown not to differ significantly in its microstructure from natural rubber and SN Ameripol. It is quite similar to these in its technological and physico-mechanical properties. The structure of the rubber was determined by the infra-red spectroscopy method. A detailed description of the structure is given and Table 1 shows the data of its comparison with natural rubber and Ameripol SN. Its physico-mechanical properties are discussed. It was found that the SKI-3

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A051/A029

The Properties of СКИ-3 (SKI-3), a New Synthetic Isoprene Rubber

rubber at a given composition vulcanizes at about the same rate as natural rubber and in this way differs from the quickly-vulcanizing lithium-isoprene rubber. The elevated rate of vulcanization in the former is probably explained by the presence of residual catalyst. SKI-3 is close to natural rubber in its temperature resistance (at 100°C). It was also found that rubbers produced with complex catalysts have a more uniform structure, better technological properties and a higher temperature resistance, but their elastic dynamic properties are inferior to the high-molecular lithium-isoprene rubber. The authors think that SKI-3 due to its many valuable properties is of great significance to the tire and rubber industries. There are 4 tables, 1 figure and 9 references: 4 Soviet and 5 English.

ASSOCIATION: Vsesoyuznyy institut sinteticheskogo kauchuka im. S.V. Lebedeva (All-Union Institute for Synthetic Rubber imeni S.V. Lebedev)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKH, V.N.; SAMOLETOVA, V.V.; IVANOVA, L.S.; FERINGER, D.P.; KORMER, V.A.

Properties of the SKI-3, new synthetic isoprene rubber. Kauch.i rez. 19 no.3:1-5 Mr '60. (MIRA 13:6)

1. Vsesoyuznyy institut sinteticheskogo kauchuka im. S.V.Lebedeva.
(Rubber, Synthetic) (Isoprene)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

Reykh, V.Yu.

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Akademiya nauk SSSR. Institut khimicheskoy fiziki

Okisleniye uglevodorodov v zhidkoy faze; sbornik statey (Oxidation of Hydrocarbons in the Liquid Phase; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 334 p. Errata slip inserted. 2,200 copies printed.

Ed.: N. M. Emanuel', Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: K. M. Dyumayev; Tech. Ed.: I. F. Kuz'min.

PURPOSE: This collection of articles is intended for chemists interested in hydrocarbon oxidation reactions, particularly for those specializing in petroleum fuels.

COVERAGE: This collection of 35 articles represents the results of investigations over a period of several years on problems of hydrocarbon oxidation. The authors present their own theoretical and experimental data and also draw from current literature. No personalities are mentioned. References accompany most of the articles.

Rafikov, S.R., and B.V. Suvorov [Institut khimicheskih nauk Akademii nauk Kazakhskoy SSR (Institute of Chemistry, Academy of Science Kazakhskaya SSR)]. Mechanism of the Action of Inhibitors on Oxidation by Molecular Oxygen 94

The authors show that oxidation inhibitors are not effective when they oxidize faster than the compounds being oxidized. Optimum inhibiting effect occurs in the initial reaction stages when the concentrations of inhibitors are comparable with concentrations of free radicals and peroxides.

Berezin, I.V., L.G. Berezkina, and T. A. Nosova [Moscow State University imeni M.V. Lomonosov]. Using the Tagged-Atom Method to Study Intermediate Reactions of Fatty Acids and Esters in the Liquid-Phase Oxidation of Paraffin 101

The authors have synthesized n-decane and stearic acids with the carboxyl radicals tagged with C^{14}. It is shown that the main portion of esters formed during paraffin oxidation are not products of direct esterification of acids by the alcohols formed during oxidation, but are formed by the decomposition and regrouping of free radicals from ketone α-hydroperoxides.

Shlyapintokh, V.Ya., and N.M. Emanuel' [Institute of Chemical Physics]. Mechanism of the Optical Sensitization of Liquid-Phase Oxidation by Molecular Oxydation of 2, 7-Dimethyloctane 113

The combined effects of photochemical activation and the catalytic action of polyvalent metal (Cu^{2+} and Fe^{3+}) stereates on the oxidation of 2,7-dimethyloctane are investigated. Additions of metal salts play the role of photoinitiators. The authors detect reaction acceleration caused by the photolysis of Cu^{2+} and Fe^{3+} stereates, and confirm the formation of free radicals which cause this acceleration.

Tinyakova, Ye.I., F.A. Dolgoplosk, and V.N. Reykh [Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High Molecular Compounds, Academy of Sciences USSR; Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka (All-Union Scientific Research Institute of Synthetic Rubber)]. Oxidation-Reduction Systems for Initiating Oxidation Processes in Hydrocarbon Media and the Mechanism of Their Action 117

The authors show that oxidation-reduction systems, widely used for initiating low-temperature polymerization processes, can be successfully employed for initiating oxidation reactions. The role of polyvalent metal salts in the decomposition of peroxides and the oxidation of hydrocarbons is discussed.

Blyumberg, E.A., Z.K. Maýzus, and N.M. Emanuel' [Institute of Chemical Physics]. Liquid-Phase Oxidation of n-Butane at Near-Critical Temperatures and Pressures 125

The authors discuss the kinetics and chemistry of a purportedly new method for liquid-phase oxidation of n-butane. Initiating the reaction with NO_2 and catalyzing with $CoSt_2$ resulted in a shorter induction period by increasing the initial rate of chain growth. Acetic acid and methyl ethylketone are the principal products of the reaction.

Maýzus, Z.K., L.G. Privalova, and N.M. Emanuel' [Institute of Chemical Physics]. Change in the Mechanism of n-Decane Oxidation in the Course of the Reaction 152

The authors have used C^{14} tagged n-decane to investigate changes in the rates of formation and consumption of n-decyl hydroperoxides during the oxidation of n-decane. The hypothesis that variations in the activities of radicals carrying on chain reactions are proportional to the accumulation of oxygen-containing oxidation products in the reacting m[illegible]ffered as a possible [illegible]ation of the phenomenon

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

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A051/A029

15.9300

AUTHORS: Reykh, V.N., Samoletova, V.V., Baranova, G.P., Ivanova, L.S.

TITLE: Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

PERIODICAL: Kauchuk i Rezina, 1960, No. 10, pp. 6-12

TEXT: In 1956, in the USSR the following polymer was synthesized using complex catalysts: cis-1,4-divinyl rubber, having a structure of: cis-1,4-links 70%, trans-1,4-links 25% and 1,2-links 2-5% (Ref. 12) and the following properties: vitrification temperature of the polymer -102°C, molecular weight 350000, unsaturation 94-100%. Later on divinyl polymers containing cis-1,4-links up to 95% were produced. In 1958 the possibility of obtaining regularly-constructed divinyl rubbers using lithium as catalyst was proven. The 1,4-link content in this polymer was as high as 85%, the vitrification temperature fluctuated within the range of -100 to -105°. In the present article the authors deal with the properties of cis-1,4-divinyl rubber obtained by the polymerization of a 99% divinyl rubber using complex catalysts, and also with the properties of lithium-divinyl rubber. The properties of the regularly-constructed divinyl rubbers are compared to that of the industrial types of

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

natural and divinyl rubber. The polymers synthesized with complex catalysts (СКД-SKD) were found to have a more regular structure than those of the lithium-divinyl type (СКЛД-SKLD). Table 2 gives an indication of these structures and the respective vitrification temperatures. An outstanding feature of the investigated divinyl rubbers is their high resistance to oxidation destruction. The introduction of 1% phenyl-β-naphthalamine insures a satisfactory stability of this rubber in its processing and storage. Rubbers of various molecular weight were obtained when using complex catalysts depending on the conditions of polymerization and, accordingly, different plasticity (the plasticity varied from 0.10 to 0.70). The lithium-divinyl rubber under the given conditions of polymerization was obtained with a high molecular weight only (plasticity 0.05-0.10). The SKD-rubber can be satisfactorily processed on laboratory equipment. During the rolling process it acquires a dense coating and is comparatively easily mixed with the ingredients. The SKLD-rubber crumbles in the rolling process and without preliminary mastication cannot be applied to the production of rubber mixtures. The mastication of divinyl rubbers can be accomplished using chemical plasticizers. In the case of the

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

SKLD-rubber the best plasticizer among those being tested proved to be an oxidation-reduction system, consisting of "galipot" (boiled pine resin ГОСТ 840-41 -GOST 840-41) and iron naphthanate. The indicated system (at moderate temperature (130°C) and in a relatively short period of time, viz., 20-30 min) was able to raise the plasticity of the rubber from 0.05-0.10 to 0.50-0.70. It is further pointed out that the investigated rubbers, SKD and SKLD, have no adhesive properties. The technological properties of filled divinyl rubbers were found to be unsatisfactory. The introduction of channel carbon black caused the plasticity to drop, which is explained by the fact that divinyl rubbers do not destructuralize during the mechanical processing, contrary to natural or isoprene rubbers. The type of carbon black used was also found to have an effect on the mixture. Mixtures containing Filbreck "O" carbon black have a much better surface in calendering and atomizing than those filled with gaseous carbon black. Large quantities of softener or plasticizer are suggested to improve the technological properties of filled divinyl rubber mixtures. The vulcanizate properties of divinyl rubbers were studied by comparing them to that of the industrial type divinyl rubbers: СКБ (SKB), СКВ (SKV-potassium-divinyl

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

rubber) and СКБМ (SKBM-lithium-divinyl rubber) having the same plasticity as well as with natural rubber and divinyl-styrene rubber, СКС-30А (SKS-30A). Carbon black-filled vulcanizates were chosen for the investigation with respect to the industrial type divinyl rubbers and SKLD. The tear-resistance of the non-filled more regularly constructed SKD polymers (cis-1,4-links 92-95%) was found to be higher and equal to 80 kg/cm^2. Table 4 presents the comparative figures of the physico-mechanical properties of the carbon black vulcanizates of the divinyl rubbers and that of natural rubber. It can be seen that the indicated divinyl rubbers are close to natural rubber in their elastic-dynamic properties and are superior in their wear-, frost-, and heat-resistance. The residual elongation of the divinyl rubbers decreases with an increase of the cis-1,4-link content, which is assumed to be connected with the relaxation phenomena. The temperature stability of all divinyl rubbers including that of SKD is lower than that of natural rubber. The figures are actually misleading since the testing of the divinyl rubber as compared to natural rubber is conducted at higher temperatures, if the zero point is taken at the vitrification temperature. The highest frost-resistance was found to be in SKD and

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

SKLD rubbers, which corresponds to their lower vitrification temperature. At a temperature of 20°C the elasticity of the SKD rubber is much higher than that of the natural rubber with the same carbon black content in the mixture. The SKD and SKLD rubbers have a higher elasticity than the SKS-30A. Since the elasticity of SKD, SKLD and natural rubber at elevated temperatures is almost the same, the heat formation and mechanical losses of the vulcanizates of these rubbers are close. The vulcanizates of the SKD and SKLD rubbers retain their elastic and resistance properties well after heat aging (Table 6), which is a great advantage of the divinyl rubber as compared to the natural rubber. One of the greatest advantages of the regularly-constructed divinyl rubbers is their high wear-resistance, which, in turn, is higher in SKD than in SKLD. Finally, the SKD rubber has a high resistance to crack growth, determined according to the method of H.E. Railsbeck. Concluding, the author emphasizes again all the valuable properties of the regularly-constructed divinyl polymers, stating that these properties of the cis-divinyl rubber make it applicable as a rubber for general use by itself or in a mixture with natural rubber primarily for the tire industry or for frost-resistant articles. The authors

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

think that this rubber has a great future due to the presence of a large raw material base of the initial monomer (divinyl) and its comparatively low price. There are 6 tables, 4 graphs and 12 references: 1 Soviet, 10 English, 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva (All-Union Scientific-Research Institute of the Synthetic Rubber Industry im. S.V. Lebedev).

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

Table 2

The Structure of Divinyl Rubbers

Type of rubber	Catalyst	link content, %				Vitrification temp. °C
		1,4	cis-1,4	trans-1,4	1,2	
SKD	Complex	92-96	80-95	1-12	4-8	-105 - 110
SKLD	Lithium	85	40	45	15	-100 - 105

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

Table 6

Heat-resistance of divinyl rubber vulcanizates and natural rubber (aging period 96 hrs. at 100°C)

Indices	Type of rubber					
	SKD		SKLD		Natural rubber	
	before aging	after aging	before aging	after aging	before aging	after aging
Tear-resistance kg/cm^2	236	137	185	130	320	54
recoil elasticity at 20°, at 100°	50-55	53-59	50	50	--	--
	55	60-62	52	57	--	--

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Properties of Divinyl Rubbers With a Regular Structure and That of Their Vulcanizates

Table 4

Physico-mechanical properties of carbon black vulcanizates of divinyl rubbers and natural rubber (temperature of vulcanization 143°C)

Properties	type of rubber						
	SKD	SKLD	SKBM	SKV	SKB	SKS-30A	NR
Plasticity of the rubber	0,50	0,50-0,60	0,50	0,50	0,50	0,50	--
Modulus at 300% elongation, kg/cm^2	60-75	60-75	60-75	60-75	60-75	70	75
Tear resistance kg/cm^2	220-270	150-190	150-170	150-170	150	280	320
Relative elongat. %	500-700	500-190	600	600	600	650	640
Residual elongation, %	10-15	10-20	20-30	20-30	30-50	25	40

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AUTHORS: Livshits, I.A., Reykh, V.N., Ryazantsev, K.P., Salnis, K.Yu., Samoletova, V.V., Stepanova, V.I., Shlifer, D.I.

TITLE: The Properties of Copolymers of Ethylene and Propylene

PERIODICAL: Kauchuk i rezina, 1960, No. 11, pp. 1-5

TEXT: The authors list data on the properties of СКЭП (SKEP), one of the ethylene and propylene copolymers synthesized at the VNIISK. It is pointed out that research in the field of polymerization of ethylene hydrocarbons at the VNIISK was begun in 1956. It is stated that the indicated copolymers can be produced within a wide range of molecular weights. The hardness of the polymers, according to Defoe, is 1,400-5,000 g, characteristic elasticity of their solution is from 2.5 (and lower) to 9.0. The vitrification point of the SKEP copolymer is within the range of -50 to 70°C depending on the ratio of the ethylene and propylene. The SKEP copolymers are a dense white hard mass, comparatively easy to process on the rollers. Destruction occurs when they are processed mechanically on the rollers. The greatest destruction is observed in polymers with a high

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The Properties of Copolymers of Ethylene and Propylene

molecular weight (Table 1). Mixtures based on SKEP copolymer were prepared on laboratory rollers at a temperature of 50-60°C. It was found that SKEP copolymers are easily mixed with comparatively large quantities of fillers. Mixtures without softeners are dry, brittle, their surface resembling shagreen leather. During vulcanization they easily form a monolithic mass with a smooth, shiny surface. Vulcanization is carried out at 150-160°C. SKEP copolymer-based mixtures are characterized by a large vulcanization plateau (Fig. 1). The vulcanizates of non-filled mixtures based on the ethylene and propylene copolymer have a low tear-resistance. When a filler is added, especially gaseous channel carbon black and active furnace carbon black of the ХАФ (KhAF) type, the tear-resistance increases significantly. Vulcanizates containing one of the indicated carbon blacks in a quantity of 50 weight parts hardly differ in this index from similar vulcanizates based on natural rubber (Fig. 2). The physico-mechanical properties of carbon black vulcanizates based on SKEP copolymers depend on the molecular weight of the latter. A detailed study of the physico-mechanical properties of the SKEP copolymers was conducted for a mixture containing 45 weight parts of KhAF carbon black. Comparisons were made

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between these properties and those of the C-23 (S-23) rubber, CHC-30A (SKS-30A) and natural rubber. Gaseous channel carbon black was used as the filler for natural and SKS-30A rubber, which causes optimum stability properties in the indicated rubbers. Vulcanizates of carbon black mixtures based on SKEP copolymer were found to be almost equal to the vulcanizates of similar mixtures based on natural rubber and SKS-30A in their tear-resistance and relative expansion. Higher moduli are obtained at 300% expansion in SKEP vulcanizates by the application of a high standard carbon black (KhAF) instead of channel carbon black. The values of the vulcanizate moduli of the SKEP mixtures may be increased or decreased by using various methods of vulcanization. The SKEP vulcanizate mixtures have lower residual elongations than the natural rubber and SKS-30A vulcanizates. They also have a higher elasticity to recoiling at ordinary and high temperatures, which is explained by the comparatively low content of side groups in the polymer chains. When elevating the testing temperature to 100°C, the tear-resistance dropped in the SKEP vulcanizates to a greater degree than in the natural rubber vulcanizates, although it remained sufficiently

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high. In this index the experimental SKEP copolymers greatly surpass SKS-30A rubber. Due to the almost complete absence of double bonds in the SKEP copolymer, rubbers based on the latter have a very high aging resistance at 100°C and at 150°C and are better in this respect than natural rubber. SKEP polymers are characterized by low hysteretic losses. In this respect they are almost equal to natural rubber and surpass SKS-30A rubbers significantly. Other valuable properties of the SKEP vulcanizates were found to be their high resistance to crack expansion in repeated bending deformations and a high wear-resistance. The latter surpass the natural rubbers greatly in their tear-resistance and come close to the regularly constructed divinyl rubbers (Ref. 5). Since different types of carbon blacks were used as fillers for SKEP, natural and SKS-30A rubbers, it was assumed that the high wear-resistance of the SKEP vulcanizates was connected with the use of the KhaF carbon black, which renders a higher wear-resistance. Additional experimental testing revealed that the type of carbon black has little effect on the wear-resistance of the vulcanizates of carbon black mixtures in the case of vulcanizates based on natural and SKS-30A rubber

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The Properties of Copolymers of Ethylene and Propylene

(Table 4). In conclusion the authors point out that the ethylene and propylene (SKEP) copolymers have a series of valuable physico-mechanical properties and are of great industrial interest. There are 4 tables, 2 graphs, 5 references: 1 Soviet, 3 English, 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber im. S.V. Lebedev)

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The Properties of Copolymers of Ethylene and Propylene

Table 1: Change in the characteristic elasticity of SKEP copolymer solutions under mechanical processing on the rollers

Characteristic elasticity							
Before processing	after processing on the rollers at 20°C during				after processing on the rollers at 80°C during		
	2 min.	10 min.	30 min.	60 min.	10 min.	30 min.	60 min.
8,30	5,70	---	---	2,90	---	---	3,80
5,00	4,20	2,43	1,95	1,81	2,70	2,70	2,54
2,80	---	---	---	1,60	---	---	1,74

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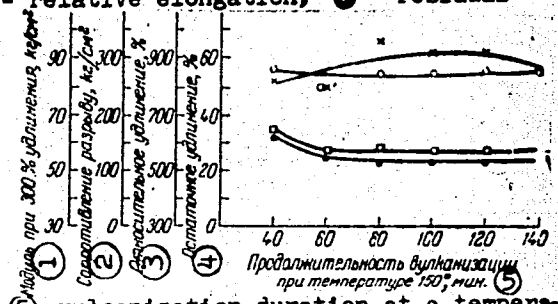
The Properties of Copolymers of Ethylene and Propylene

Figure 1: Change in the physico-mechanical properties of vulcanizate mixtures based on SKEP polymer depending on the vulcanization duration: ○ - tear-resistance; × - modulus at 300% expansion; □ - relative elongation; ● - residual elongation.

① modulus at 300% elongation, kg/cm²
② tear-resistance, kg/cm²
③ relative elongation, %
④ residual elongation, %



⑤ vulcanization duration at a temperature of 150°C, min

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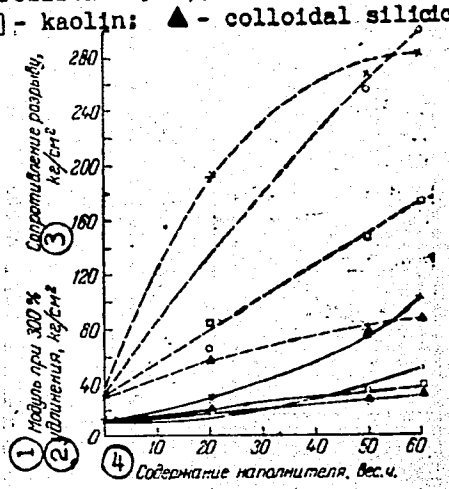
Figure 2: Change in the modulus at 300% of elongation and tear resistance of the vulcanization mixtures based on SKEP polymer and the dependence on the type and filler content. ——— modulus: ------ tear resistance; X - furnace carbon black KhAF; ○ -gaseous channel carbon black; □ - kaolin; ▲ - colloidal silicic acid.

① modulus at 300%; ② elongation, kg/cm^2
③ tear-resistance, kg/cm^2



④ Filler content, weight parts

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Table 2: Relationship between the physico-mechanical properties of the SKEP mixture vulcanizates with 45 w.p. of KhAF carbon black to the elasticity of the copolymer solutions.
(1) characteristic elasticity; (2) - hardness according to Defoe, g; (3) - modulus at 300% of elongation, kg/cm²; (4) - resistance to breaking, kg/cm²; (5) - relative elongation, %; (6) - residual elongation, %; (7) - elasticity to recoiling, %; (8) - hardness according to Shore.

Характеристическая эласт. кос. (1)	Твердость по дефо, г (2)	Модуль при 300 % удлинения, кг/см² (3)	Сопротивление разрыву, кг/см² (4)	Относительное удлинение, % (5)	Остаточное удлинение, % (6)	Эластичность по отскоку, % (7)	Твердость по Шору (8)
2,60	2250	73	244	640	52	43	67
3,00	2150	78	267	670	21	52	64
4,00	3050	85	284	580	24	52	63
5,00	4750	88	304	590	24	54	63

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The Properties of Copolymers of Ethylene and Propylene

Table 4: The effect of the type of the carbon black on the wear-resistance of vulcanizates of carbon black mixtures, based on NR and SKS-30A

type of carbon black	Wear-resistance, cm^3/kwh	
	NR	SKS-30A
gaseous channel	300	270
active furnace	250	240
KhAF type		

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AUTHORS: Reykh, V. N.; Kalaus, A. Ye.; Boguslavskiy, D. B.; Opalev, A. I.; Dubovik, L. I.; Borodushkina, Kh. N., and Fedorova, Yu. I.

TITLE: Ternary copolymers of butadiene, styrene and 2-methyl-5-vinylpyridine

PERIODICAL: Kauchuk i rezina, no. 3, 1961, 2-8

TEXT: The technical properties, including wear-resistance, of butadiene-styrene polymers can be improved by introducing links containing functional groups into the polymer chain. The main shortcomings of the copolymers with 2-methyl-5-vinylpyridine are their poor compatibility with other polymers hampering the achievement of satisfactory tensility of the protector rubber bond with the breaker rubber and a high tendency of the mixtures based on double copolymers to scorching. The present article studies the initial materials and the technical properties of ternary copolymers, development of a formulation on its base and the results on industrial tests of protector rubbers of a new type. Ternary copolymers of butadiene, styrene and 2-methyl-

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Ternary copolymers of...

5-vinylpyridine were synthesized on the base of a polymerization formulation adopted for СКС-30А (SKS-30A). The effect of 2-methyl-5-vinylpyridine on the main physico-mechanical properties of vulcanizates was studied and it was found that the ternary copolymers varied depending on the 2-methyl-5-vinylpyridine content (Table 1). They were found to have a higher tensility index and elasticity as compared to rubbers based on the ternary copolymer with α-methylstyrene. The copolymers of butadiene, styrene and 2-methyl-5-pyridine produced at the ratio of the monomers of 70:25:5 have the most promising properties. Rubbers produced on a СКС-25 МВП-5 (SKS-25 MVP-5) base with gaseous channel and anthracene carbon blacks are superior to similar rubbers based on butadiene-styrene rubber in their wear-resistance and resistance to crack growth in repeated deformations. The formulations of the protector rubbers based on SKS-25 MVP-5 material were developed and an experimental batch of tire casings 6,00 - 16 in size to be used for service tests was manufactured. Table 2 shows the results of the physico-mechanical testing of vulcanizates based on SKS-25 MVP-5 and SKMVP-15A, SKS-30A, SKS-30AM for comparison. The important advantage of butadiene, styrene and 2-methyl-5-vinylpyridine copolymers is said to be the high stability to scorching at elevated temperatures

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Ternary copolymers of...

(Fig. 1). The effect of certain vulcanizing agents, such as zinc oxide, magnesium oxide, sulfur, as well as certain accelerators, was investigated (Table 3, Fig. 2). The change in the main properties of the vulcanizates depending on the type and amount of carbon black is shown in Figure 3. The noted characteristics of the vulcanizates based on methylvinylpyridine rubbers are thought to be connected with the intensified interaction between the active functional groups in the molecular chain of the copolymer and the carbon black particles, on the surface of which compounds of an acidic nature are adsorbed. In studying the effect of the different softeners, e. g., standard mixtures of rubrax, fuel oil, avtol-18, extract of the phenol purification of petroleum oils, stearin, fatty acids, pine resin and polydienes on the plasto-elastic and physico-mechanical properties, it was seen that the extract of the phenol purification of petroleum oils (ПН-6, PN-6) has the best effect on these properties. Experimental work was carried out to increase the strength of adhesion between the NR breaker tires and the SKS-25 MVP-5 treads by using double-layer treads, where the road rubber contained SKS-25 MVP-5 and the sub-groove rubber SKS-30ARM. The experimental data showed that the fixing of the methylvinylpyridine tread to the NR breaker through a sub-groove layer made of butadiene-styrene rubber ensures a

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Ternary copolymers of...

high strength of adhesion of the doubled system. There are 6 tables, 3 sets of graphs, 9 references: 5 Soviet, 3 English, 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva i Yaroslavskiy shinnyy zavod (All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev and the Yaroslavl' Tire Plant)

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REYKHARD, E., doktor

Hungarian research in the manufacture of construction materials. (MIRA 14:5)
Stroi. mat. 7 no.4:39-40 Ap '61.
(Hungary--Building materials industry)

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RAKHMANOV, A.A., Cand Chem Sci--(diss) "Absorption of iodine from the gas phase (iodine-air mixture) by liquid sorbents." Len, Sci-Tech Information of the State Inst of Applied Chemistry, 1958. 11 pp (State Committee of the Council of Ministers USSR on Chemistry. State Order of Labor Red Banner Inst of Applied Chemistry), 150 copies. On ~~the~~ cover ~~under~~ subtitle: Author's abstract ~~Abstract~~ of ~~the~~ dissertation ~~on the~~ competition for the scientific degree of Cand of Tech Sci), (KL,48-58, 102)

-15-

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT, A. A.

The system platinum-oxygen. I. S. M. Ariya, M. P. Morozova, G. S. Markevich, and A. A. Reikhardt [A. A. Zhdanov State Univ., Leningrad]. *Sbornik Statei Obshchei Khim., Akad. Nauk S.S.S.R.* 1, 76-82(1953).—Pt sponge prepd. by reduction of chloroplatinic acid with formaldehyde in an alkali medium and dried at 140° was heated in an atm. of O in the range 430-600° and 8.5-310 atm. The percentage of O taken up (from 7.8 to 9.4) was but slightly affected by the temp. or pressure. Treatment with aqua regia resulted in addnl. adsorption of O. The x-ray powder pattern of Pt sponge with low O content showed the 7 lines of Pt; as the O content increased, these lines vanished. The pattern of the completely oxidized sponge before and after treatment with aqua regia was different from that of metallic Pt and was the same within the range $PtO_{1.33}$-$PtO_{1.10}$. Pt sponge with 10.2% O was heated at 850° under reduced pressures, and the process was followed by x-ray analyses and d. detn. The results led to the conclusion that O in excess of $PtO_{1.33}$ was adsorbed and readily driven off above 400° even under high pressures (240 atms.) and that in the system Pt-O only 1 phase, approaching the compn. of Pt_3O_4, was thermodynamically stable and that under equil. pressures it decompd, according to the reaction $Pt_3O_4 \rightleftharpoons 3Pt + 2O_2$. X-ray analysis demonstrated a tetragonal crystal structure with the consts. a 7.98, c 5.4 A., and Z 4. Pycnometric d. (12.1) was in good agreement with the value obtained from x-ray consts. (12.37). This refutes the conclusion of Galloni and Coffo (*C.A.* 36, 696[8]) that Pt_3O_4 has a body-centered cubic symmetry. The mol. magnetic susceptibility of $PtO_{1.33}$ is $+170 \times 10^{-6}$. This and the elec. cond. eliminate the possibility of an ionic model for this substance. I. Bencowitz

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REYKHARDT, A. A.

Sep 53

USSR/Chemistry - Platinum Oxides

"Investigation of the System Platinum-Oxygen. II. Enthalpy of the Formation of the Platinum Oxide Pt_3O_4," S. M. Ariya, M. P. Morozoca and A . A. Reykhardt, Chair of Inorg Chem, Leningrad State U.

Zhur Obshch Khim, Vol 23, No 9, pp 1455-1458

By means of a calorimetric detn of the enthalpy of the reaction $PtO_{1.39}$ $1.39(H_2)$ Pt $1.39H_2O$, the magnitude of the enthalpy involved in the formation of platinum oxide was found: $H_f PtO_{1.39}$ -13.6 - 1.1 kcal. The indicated magnitude agrees with the results of an investigation into the equilibrium of the process of dissociation of platinum oxide.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT, A.N. [deceased]; KRYZHANOVSKIY, O.L.

Histerid beetles (Coleoptera) from southeastern China. Ent. obozr. 43 no.1:170-174 '64 (MIRA 17:6)

1. Zoologicheskiy institut Akademii nauk SSSR, Leningrad.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

KHLOPIN, N.Ya.; REYKHARDT, G.F.

Determining the number of electrones taking part in the reducing process of stypticin on the dropping mercury electrode. Zhur. ob.khim. 28 no.1:264-267 Ja '58. (MIRA 11:5)

1.Permskiy farmatsevticheskiy institut.
(Cotarnine chloride) (Polarograph and polarography)
(Electrodes, Dropping mercury)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT, G.F.

KHIOPIN, N.Ya.; REYKHARDT, G.F.

Polarographic behavior of stypticine. Zhur. ob. khim. 26 no.10:2685-2687 O '56. (MIRA 11:3)

1. Molotovskiy farmatsevticheskiy institut.
(Polarography) (Stypricine)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT, G. F.

79-1-58/63

AUTHORS: Khlopin, N. Ya., Reykhardt, G. F.

TITLE: The Determination of the Number of Electrons Participating in the Reduction Process of Stipticin at a Mercury Dropping Electrode. II. (Opredeleniye chisla elektronov, prinimayushchikh uchastiye v protsesse vosstanovleniya stiptitsina na kapel'nom rtutnom elektrode. II.)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 1, pp.264-267 (USSR)

ABSTRACT: For the determination of the number of electrons participating in the reaction at a very small mercury electrode the fundamental equations of polarography can be used. But this method cannot be employed when the process to be investiated is not reversible. In recent years quite a number of papers was published on the determination of the number of electrons participating in the electron reaction with the aid of the coulombmetrical methods (references 1 - 6). Very convenient and simple in this respect appears to be the method of polarographic culometry which consists in a division of the quantity of electricity through the quantity of the reduced

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

The Determination of the Number of Electrons Participating in the Reduction Process of Stipticin at a Mercury Dropping Electrode .II.

product. The number of molecules of the reduced product is calculated according to the duration of the highest amperage. The counting of the number of electrons participating in the process can be carried out in different manners. The greatest interest, due to its simplicity, was excited by the logarithmical and average-arithmetical procedure. The following formula seems to be most convenient for the calculation of the number of electrons n according to the former:

$$n = \frac{I}{c_o} \cdot \frac{K}{222.10^3 . v}$$

where I_o is the highest amperage, c - the initial concentration of the product and v - the volume of the electrolyte (further explanations are given on page 265). The second method permits the simple control of the characteristic of the mirror galvanometer - the inevitable quantity for obtaining a regular diffusion current in µA. With the aid of polarographic culometry it was found that in the reduction process of stipticin at a tiny mercury electrode two electrons are in activity. On the basis of the structure of stip-

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

79-1-58/63

The Determination of the Number of Electrons Participating in the Reduction Process of Stipticin at a Mercury Dropping Electrode . II.

ticin it may be admitted that this reaction takes place at the expense of the double formation of the heterocyclic ring. There are 1 figure, and 8 references, 3 of which are Slavic.

ASSOCIATION: **Perm' Pharmaceutical Institute**
(Permskiy farmatsevticheskiy institut)

SUBMITTED: January 18, 1957

AVAILABLE: Library of Congress

Card 3/3 **1. Stipes-Reduction 2. Electrons-Determination**

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT G.F. Reykhardt, G.F.

Polarographic behavior of Stypticine. I. N. Ya. Khlopin and G. F. Reikhardt (Pharm. Inst., Molotov). *Zhur. Obshchei Khim.* 20, 2085-7(1950).—Polarographic reduction of Stypticine (a hemostatic medicinal; *N*-methyl-6,7-methylenedioxy-8-methoxy-3,4-dihydroisoquinolinium chloride) in acetate and phosphate buffer solns. yields the following values for the half-wave potentials: at pH 2.5-0.8 v., at pH 9-13 v. (relative to satd. calomel electrode). In 2*N* KCl the slope of the polarographic curve is more shallow (from −1 to −1.5 v.). The curve shows but one wave, and in the range of pH 2.5-9 the reduction can be used with concns. of 0.117-0.909 millimoles/l. of the drug.

G. M. Kosolapoff

2

Chem

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHARDT, G. F.

1642. Polarographic behaviour of Stypticin [cotarnine]. I. N. Ya. Khlopin and G. F. Reikhardt (Molotov Pharm. Inst.). *Zhur. Obshch. Khim.*, 1956, 26 (10), 2685–2687.—In buffered oxygen-free solutions of pH from 2·5 to 9, cotarnine (0·1 to 1·0 millimole) gives a polarographic wave on the dropping-mercury electrode at −0·8 to −1·3 V *vs.* the S.C.E. G. S. SMITH

Med

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

AGAPOVA, T.I., red.; DORODNOV, Ye.V., red.; KASHCHENKO, Ye.I., red.; KRUSHANOV, A.I., red.; REYKHBERG, G.Ye., red.; VOROB'YEV, V.V., red.; BORZUNOV, V.F., red.

[Abstracts of papers and reports of the Third Far Eastern Conference on History, archaeology and Ethnography Section: Socialist building projects in Siberia and the Far East] Tezisy dokladov i soobshchenii. Sektsiia: Sotsialisticheskie novostroiki Sibiri i Dal'nego Vostoka. Komsomol'sk-na-Amure, Komsomol'skii-na Amure Gospedinstitut, 1962. 76 p. (MIRA 17:9)

1. Dal'nevostochnaya konferentsiya po istorii, arkheologii i etnografii. 3d, Komsomolsk-on-Amur, 1962. 2. Komsomol'skiy-na-Amure Gosudarstvennyy pedagogicheskiy institut (for Kashchenko). 3. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR (for Reykhberg). 4. Institut geografii Sibirskogo otdeleniya AN SSSR (for Vorob'yev). 5. Institut istorii AN SSSR (for Borzunov).

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHEFEL'D, V.O.; BONDARENKO, A.I.

Addition of unsaturated compounds to dimethylmethyl polysiloxanes.
Vysokom.soed. 3 no.3:487 Mr '61. (MIRA 14:6)
(Siloxanes)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHEL', V.I.; LIBERZON, D.M.

Suppurative peritonitis as a complication of spleen infarction in septic endocarditis. Pediatriia 4 no.7:71-72 Jl'63 (MIRA 16:12)

1. Iz kliniki khirurgii detskogo vozrasta (zav. - prof. N.V. Zakharov) Saratovskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHEL', V.I.; LIBERZON, D.M.

Hamman-Rich syndrome (diffuse interstitial pulmonary fibrosis).
Pediatriia 4 no.7:73-76 Jl'63 (MIRA 16:12)

1. Iz kliniki khirurgii detskogo vozrasta (zav. - prof. N.V. Zakharov) Saratovskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

REYKHENBAKH, M.O

EXCERPTA MEDICA Sec.5 Vol.10/4 Gen.Pathology Apr 57

1032. REICHENBACH M.O., JAROVA E.M. and KHOKHLOVA M.P. Inst. Centr. d'Hématol. et de Transf. Sang. de l'Ordre de Lénine, Moscou. *Influence de la névrose expérimentale sur le développement de la leucose chez la souris. The effect of experimental neurosis on the development of leucosis in mice SANG 1956, 27/3 (177-188) Illus. 7

Twenty mice aged 2 months were submitted to electric stimulation several times per day, always preceded and followed by acoustic stimuli. Twenty other mice received in addition one injection of 0.1 ml. 1% 9:10-dimethyl-1:2-benzanthracene dissolved in mouse fat. Twenty mice were treated with the carcinogen alone and 20 were used as controls. Although all the animals died from an unknown infectious disease, some animals of the second group (nervous shock + carcinogen) had developed phenomena of leukaemia. These phenomena occurred a few months after the beginning of the experiment. In strains with a high frequency of spontaneous leukaemia, the stimulation definitely promoted the development of the disease.

Giordano - Milan (V.16)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

SERGEYEV, A.A., red.; ANPILOGOV, I.M., red.; ASSONOV, V.A., red.; BABAYANTS, N.A., red.; BABOKIN, I.A., red.; BALAMUTOV, A.D., red.; BOGORODSKIY, N.N., red.; BOLONENKO, D.N., red.; BUCHNEV, V.K., red.; VAKHMINTSEV, G.S., red.; VORONKOV, A.K., red.; GARKALENKO, K.I., red.; GORBATOV, P.Ye., red.; GOLOVLEV, V.Ya., red.; DOKUCHAYEV, M.M., red.; DUBNOV, L.V., red.; YEVTEYEV, A.D., red.; YEREMENKO, Ye.K., red.; ZENIN, N.I., red.; KRIVONOGOV, K.K., red.; KUPALOV-YAROPOLK, I.K., red.; MATSYUK, V.G., red.; NIKOLAYEV, S.I., red.; ONISHCHUK, K.N., red.; PETROV, K.P., red.; PILYUGIN, B.A., red.; PLATONOVA, A.A., red.; POLESIN, Ya.L., red.; POKROVSKIY, L.A., red.; POMETUN, D.Ye., red.; POLYUSHKIN, A.Kh., red.; REYKHER, V.P., red.; SEDOV, N.A., red.; SIDORENKO, I.T., red.; FIDELEV, A.A., red.; CHAKHMAKHCHEV, A.G., red.; CHEMODUROV, M.Ya., red.; SHUMAKOV, A.A., red.; YAREMENKO, N.Ye., red.; PARTSEVSKIY, V.N., red.izd-va; ATTOPOVICH, M.K., tekhn.red.

[Standard safety regulations for blasting operations] Edinye pravila bezopasnosti pri vzryvnykh rabotakh. Izd.2. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 318 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Mining engineering--Safety measures)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

ACC NR: AP6009864 SOURCE CODE: UR/0413/66/000/004/0058/0058

INVENTOR: Reykhert, K. N.; Andreyev, A. D.; Gurov, P. G.

29
B

ORG: none

TITLE: Device for ingot cooling with an air-water mixture in continuous casting of aluminum alloys. Class 31, No. 178950

A

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 58

TOPIC TAGS: ~~cooling~~, ingot cooling, ~~continuous~~ metal casting, metalworking machinery

ABSTRACT: An Author Certificate has been issued describing a device for cooling ingots with an air-water mixture; the device consists of two chambers for air and water. To improve the quality of castings, the device is equipped with rings, which are screwed on the bottom of the crystallizer, and adjustable slots for supplying and mixing water and air as well as a slot for feeding the air-water mixture onto the ingot (See Fig. 1). [LD]

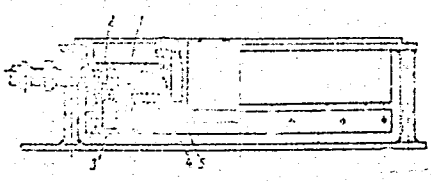

Fig. 1. Device for cooling ingots during continuous casting of aluminum alloys

1 - crystallizer chasis; 2 and 3 - rings; 4 - slots for feeding and mixing water and air; 5 - slot for feeding the air-water mixture.

Card 1/2 UDC: 621.746.27—717

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

L 44573-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)

ACC NR: AP6015716 (N) SOURCE CODE: UR/0413/66/000/009/0137/0138

10
B

INVENTOR: Reykhert, K. N.

ORG: none

TITLE: Cooling device for forming presses. 14 Class 49, No. 181483 [announced by the Metallurgical Plant imeni V. I. Lenin (Metallurgicheskiy zavod)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 137-138

TOPIC TAGS: cooling device, forming press

ABSTRACT: This Author Certificate introduces a device for cooling parts directly on the forming press. The device is designed with jets and ring shaped slits linked to a connecting pipe for water supply. To intensify the cooling rate and, at the same time, to lower the consumption of coolant, the device features another arrangement for air supply to the slits. It consists of two concentrically arranged pipes with a

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L 44573-66

ACC NR: AP6015716

space between them, linked to the water pipe, while the jets are made up of conic rings arranged in series in the interior pipe, which is equipped with holes linking the ring-shaped jet slits to the space between the pipes (see Fig. 1). Orig. art. has: 1 figure. [Translation] [LD]

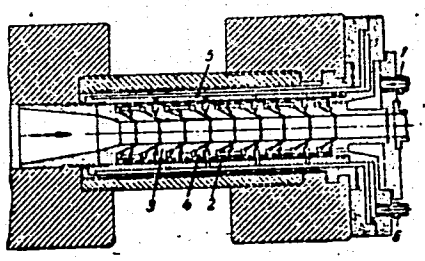

Fig. 1. Cooling device for forming presses.
1—Air pipe; 2—jet slits; 3 and 4—conic rings; 5—internal pipe; 6—water pipe.

SUB CODE: 13/ SUBM DATE: 16Jan65/

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

GELLER, Z.I.; RASTORGUYEV, Yu.L.; SUDAKOV, P.Ye.; REYKHERT, L.A., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Controlling, measuring, and regulating apparatus used in petroleum refining; instructions for laboratory work] Kontrol'-no-izmeritel'nye i reguliruiushchie pribory v neftepererabatyvaiushchei promyshlennosti; rukovodstvo k laboratornym rabotam. Leningrad, Gostoptekhizdat, 1963. 250 p. (MIRA 16:11)
(Petroleum refineries--Equipment and supplies)
(Automatic control) (Measuring instruments)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

GITTSIGRAT, Ernest Ernestovich; PINKEVICH, Al'bert Al'bertovich; VINOGRADOVA, Larisa Vasil'yevna; UTKIN, I.A., doktor tekhn. nauk, prof., red.; REYKHERT, L.A., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[English-Russian dictionary on exploration drilling] Anglo-russkii terminologicheskii slovar' po geologopoiskovomu bureniiu. Pod red. I.A.Utkina. Leningrad, Gostoptekhizdat, 1963. 318 p. (English language--Dictionaries--Russian) (MIRA 16:12)
(Boring--Dictionaries)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

SMEKHOV, Yevnoy Maksimovich; REYKHERT, L.A., vedushchiy red.; SAFRONOVA, I.M., tekhn.red.

[Regularities in the development of fracturing and fractured reservoir rocks] Zakonomernosti razvitiia treshchinovatosti gornykh porod i treshchinnye kollektory. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Leningr.otd-nie, 1961. 145 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.172). (MIRA 14:12)

(Joints (Geology)) (Petroleum geology)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

BARON, L.I., prof., doktor tekhn.nauk, otv. red.; REYKHERT, L.A., red.izd-va; ZENDEL', R.Ye., tekhn. red.

[Problems in the technology of mining ore deposits in the Kola Peninsula] Voprosy tekhnologii razrabotki rudnykh mestorozhdenii Kol'skogo poluostrova. Moskva, Izd-vo AN SSSR, 1963. 191 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Kol'skiy filial. Kirovsk.
(Kola Peninsula—Mining engineering)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

VOLKOVA, Ye.A.; DUBROV, Ye.F.; SOKOLOV, O.N.; Prinimali uchastiye: PEYBO, I.V.; BULATOVA, Zh.M.; VIRULIN, B.K., glavnyy red.; CHASHNIK, V.M., otv.red.; REYKHERT, L.A., vedushchiy red.; DODONOVA, L.P., red.; KONDYURINA, Ye.N., red.; FEDOROV, S.S., tekhn.red.

[Problems in acoustical logging] Voprosy akusticheskogo karotazha. Leningrad, Gostoptekhizdat, 1962. 151 p. (Geofizicheskoe priborostroenie, no. 13). (MIRA 16:8)

(Prospecting—Geophysical methods)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

BAYASANOV, Dilovar Bilalovich. OLEYNIKOV, V.A., kand. tekhn. nauk dots., retsenzent; KOTCHENKO, F.F., nauchn. red.; REYKHERT, L.A., ved. red.

[Automatic control of gas pipelines] Avtomaticheskoe upravlenie magistral'nymi gazoprovodami. Leningrad, Nedra, 1964. 434 p. (MIRA 17:10)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

LOGACHEV, Aleksandr Andreyevich; YANOVSKIY, B.M., doktor fiziko-matem. nauk, prof., retsenzent; REYKHERT, L.A., ved. red.; SAFRONOVA, I.M., tekhn. red.

[Course in magnetic prospecting]Kurs magnitorazvedki. Izd.2., ispr. i dop. Leningrad, Gostoptekhizdat, 1962. 360 p. (MIRA 15:12)

(Magnetic prospecting)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

DEMENITSKAYA, Raisa Mikhaylovna; FEDYNSKIY, V.V., doktor fiz.-matem.nauk, nauchnyy red.; REYKHERT, L.A., vedushchiy red.; SEGAL', Z.G., vedushchiy red.; GENNAD'YEVA, I.M., tekhn.red.

[Basic characteristics of the crustal structure based on geophysical data] Osnovnye cherty stroeniia kory zemli po geofizicheskim dannym. Leningrad, Gos. nauchn.-tekhn. izd-vo. neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie. 1961. 221 p. (Leningrad. Nauchno-issledovatel'skii institut geologii arktiki. Trudy, vol.115).
(Earth--Surface)

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[illegible], Vladimir Isaakovich; [illegible], [illegible], [illegible] red.; REYKHERT, L.A., ved. red.

[Technical supervision of the construction of pipelines] Tekhnicheskii nadzor na stroitel'stve magistral'nykh truboprovodov. Leningrad, Izd-vo "Nedra," 1964. 106 p. (MIRA 17:6)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

VIDGOP, Lev Naumovich; SAVITSKIY, Valeriy Borisovich; BRENTS, A.D., nauchnyy red.; REYKHERT, L.A., ved. red.; SAFRONOVA, I.M., tekhn. red.

[Technical and economic planning of gas pipelines] Tekhniko-ekonomicheskoe proektirovanie magistral'nykh gazoprovodov. Leningrad, Gostoptekhizdat, 1963. 186 p. (MIRA 16:5)
(Gas, Natural--Pipelines)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

BRODYANSKIY, Isor Khaimovich; REYKHERT, L.A., ved. red.; SAFRONOVA, I.M., tekhn. red.

[Marking pipeline welding fittings] Razmetka svarnykh fasonnykh chastei truboprovodov; novyi tablichno-graficheskii metod. Izd.2., perer. i dop. Leningrad, Gostoptekhizdat, 1963. 287 p. (MIRA 16:7)

(Pipe fittings)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444720019-9

KHUDOBINA, Yelena Afanas'yevna; GAPEYEVA, G.M., nauchnyy red.; REYKHERT, L.A., vedushchiy red.; GENNAD'YEVA, I.M., tekhn.red.

[Problem of oil and gas potentials of Central Asia] Problema neftegazonosnosti Sredeni Azii. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Leningr.otd-nie. Vol.4: [Igenous rocks in western Turkmenia] Magmaticheskie porody zapodnoi Turkmenii. 1961. 118 p. (Leningrad. Vsesoiuznyi geologicheskii institut. Trudy, vol.45). (MIRA 14:10)
(Turkmenistan—Rocks, Igneous)

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BRODYANSKIY, Isor Khaimovich; REYKHERT, L.A., ved. red.; SAFRONOVA, I.M., tekhn. red.

[New tabular graphic method of laying out welded fittings for pipelines] Razmetka svarnykh fasonnykh chastei truboprovodov; novyi tablichno-graficheskii metod. Izd.2., perer. i dop. Leningrad, Gostoptekhizdat, 1963. 287 p. (MIRA 16:7)
(Pipe fittings)

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BRODYANSKIY, Isor Khaimovich; REYKHERT, L.A., vedushchiy red.; GENNAD'YEVA, I.M., tekhn.red.

[Marking of welded shaped sections of pipelines; new tablegraphic method] Razmetka svarnykh fasonnykh chastei truboprovodov; novyi tablichno-graficheskii metod. Leningrad, Gos. nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-nie, 1961. 230 p. (MIRA 14:6)
(Pipelines)

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VESHEV, A.V.; YARYSHEV, B.P., nauchnyy red.; CHASHNIK, V.M., otv. red.; REYKHERT, L.A., ved. red.; FEDOROV, S.S., tekhn. red.

[Low-frequency electric prospecting apparatus] Elektrorazvedochnaia apparatura nizkoi chastoty. Leningrad, Gostoptekhizdat, 1962. 49 p. (MIRA 15:8)
(Electric prospecting--Equipment and supplies)

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REYKHMAN, I.R.; KERIMOV, B.M.

Outlook for finding oil and gas in Lower Tertiary and Cretaceous sediments on the Darwin Shoal field. Azerb. neft. khoz. 41 no.11:7-9 N '62. (MIRA 16:2)

(Apsheron Archipelago—Petroleum geology)
(Apsheron Archipelago—Gas, Natural—Geology)

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REYKHMAN, I.R.; KERIMOV, B.M.; DZHEVANSHIR, D.A.

Preliminary prospecting in the region of the Apsheron Shoal. Azerb.neft.khoz. 41 no.4:8-10 Ap '62. (MIRA 16:2)
(Apsheron Archipelago—Petroleum geology)

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REYKHMAN, I.R.; MATVEYEV, Ye.I.; KERIMOV, B.M.

Certain types of pools in the Absheron Archipelago. Izv. vys. ucheb. zav.; neft' i gaz 7 no.7:3-8 '64. (MIRA 17:9)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

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REYKHMAN, I.R.; KERIMOV, B.M.

Analysis of the results and plan for future prospecting in the Kamni Grigorenko area. Azerb. neft. khoz. 40 no.6:7-10 Je '61. (MIRA 14:8)

(Apsheron Archipelago--Petroleum geology)

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STRADYN', Ya. [Stadyn, J.]; YURASHEK, A. [Jurasek, A.]; REYKHMANIS, G. [Reihmanis, G.]

Polarographic behavior of 5-substituted furfuryl thiocyanates. Zhur. ob. khim. 35 no.5:768-773 My '65. (MIRA 18:6)

1. Institut organicheskogo sinteza AN Latviyskoy SSR i Slovatskiy politekhnicheskiy institut, khimicheskiy fakul'tet, Chekhoslovatskaya SSR, Bratislava.

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STRADYN', Ya.P. [Stradins, J.]; REYKHMANIS, G.O. [Reichmanis, G.]; GAVAR, R.A. [Gavars, R.]

Single-electron polarographic reduction of 2-nitrofuran and its derivatives in water-alcohol media. Elektrokhimiiia 1 no.8:955-961 Ag '65. (MIRA 18:9)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

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REYKHMANN, E. [Reichmann, E.], inzh. (Rumynskaya Narodnaya Respublika); KONSTANTINESKU, O. [Constantinescu, O.] (Rumynskaya Narodnaya Respublika); ANTON, I. (Rumynskaya Narodnaya Respublika); BUROVA, T., kand. tekhn. nauk

Manufacture of reed pulp in a plant with continuous action. Bum. prom. 38 no.5:5-7 My '63. (MIRA 16:8)

(Rumania--Paper industry)
(Reed (Botany))

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SARATOV, I.Ye.; GUBANOVA, L.N.; REYKHSFEL'D, V.O.

Self-association of aromatic monoorganosilanes. Zhur. ob. khim. 35 no.6:1120-1121 Je '65. (MIRA 18:6)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

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REYKHSFELD, V.O.

1075. Rukovodstvo k prakticheskim zanyatiyam v laboratorii sinteticheskikh kauchukov. (Manual for pratical use in the Synthetic Rubber Laboratory). I. A. VOLZHINSKII, V. N. L'VOV, and V. O. REIKHSFELD. Leningrad: Gosudarst. Nauchno-Tekhn. Izdat. Khim. Lit., 1955, pp. 221. Price 7s. 6d. This book contains chapters on the properties of compounds of the butadiene series, production of the monomers, polymerisation and polycondensation, and on technological processes of production of synthetic rubbers. The approach is practical, and there are 36 descriptions of exercises. 3S

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REYKHSFEL'D, V. O.

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2150. Production of butadiene furyl ethylene rubber. V. O. REIKHSFEL'D and I. I. BOLDYREVA. Sbornik Studencheskikh Rabot (Leningrad. Tekhnolog. Inst. im. Lensoveta), 1956, 112-20; Kauch. i Rezina, 1957, No. 1, 47. SS2D21MD1

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KOPYLEV, B.A.; TRABER, D.G.; SYCHEV, M.M.; GRIGOR, V.A.; REYKHSFEL'D, V.O., redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor.

[Manual for practical work in general chemical technology] Rukovodstvo k prakticheskim zaniatiiam po obshchei khimicheskoi tekhnologii. Izd.2-oe, ispr. Leningrad, Gos.nauchno-tekhn.izd-vo khim. lit-ry, 1957. 315 p. (MLRA 10:6)
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[illegible], V. I., [illegible], P. A., and [illegible], [illegible].

"Redox systems in polymirizations," a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 28 Jan-2 Feb 57, Moscow, Polymer Research Inst.

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[illegible] [illegible]REYER, V.P., [illegible]YAKOVA, [illegible].Y., DOLGOPLASK, B. A., and KALANS, A. E.

"Synthesis of acrylic rubbers and their properties," a paper presented at the 9th Congress on the Chemistry and Physics of HIgh Polymers, 28 Jan-2 Feb 57, Moscow, Rubber Research Inst.

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REYKHBAUM, Ya. D.

3506. The kinetics of vaporisation of a substance in an electric arc. Ya. D. Reichbaum. *Izv. Akad. Nauk SSSR, Ser. Fiz.*, 1956, 19 (1), 70–72; *Ref. Zhur., Khim.*, 1956, Abstr. No. 10,069.—The time taken in vaporising ore components was measured in relation to the time of appearance and disappearance of spectrum lines. The mass of the sample is related to the time of vaporisation by the equation $t = am^k$. Determination of a provides a method of collective comparison of the volatility of substances in an arc. The value of k is 0·3 to 1 and characterises the type of vaporisation. For highly volatile elements and combinations $k = 0·6$ to 0·75 and corresponds to surface vaporisation. In a discharge in hydrogen, a and k increase for Zn, Cd and Hg because of a rise in diffusion, heat conduction and absence of oxide films. Iron, Cu and Ag, which are of low volatility, vaporise at a constant rate; for these, $k = 1$. The dimensions of the samples in the crater of the arc were observed by means of a microscope with a view to explaining the law of changes in diameter at different values of k. The kinetics of vaporisation at various temp. were studied by means of an electrode with an independent source of heating. As the temp. rises in the crater, line intensity in the series of metals increases until boiling-point is reached. This provides a method for determining boiling-point with an accuracy within ± 20° C. R. Lord

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REYKHEL', P.B., inzhener.

Some aspects of planning to promote industrial methods in electrical work. Prom.energ. 11 no.11:1-4 N '56. (MLRA 9:12)

1. Uralelektromontazh.
(Electric engineering)

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SMIRNOV, N.I.; REYKHSFEL'D, V.O., kandidat khimicheskikh nauk, redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor.

[Synthetic rubber] Sinteticheskie kauchuki. Izd. 2-e, perer. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1954. 456 p. (MLRA 7:12)
(Rubber, Synthetic)

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KIRKHENSHTEYN, A., akademik, Geroy Sotsialisticheskogo Truda; KAL'NIN'SH, A. [Kalniņš A.], akademik; STRADIN'SH, P. [Stradiņš, P.], akademik; SUDRABKALN, Yan [Sudrabkalns, Jānis], narodnyy poet Latviyskoy SSR MELBARDIS, K., khudozhnik; LAPIN'SH, A. [Lapiņš, A.], narodnyy khudozhnik Latviyskoy SSR; YUROVSKIY, Yu., narodnyy artist SSSR; AVOTS, A., fotolyubitel'; VARDAUNIS, E., khudozhnik, zasluzhennyy deyatel' iskusstv Latviyskoy SSR; GAYLIS, V., kinooperator; RIDZENIYEKS, V., fotograf; KALNYN'SH, E. [Kalnins, E.]; LOGANSON, R. [Iohanson, R.], stareyshiy master khudozhestvennoy fotografii; RIEKSTS, Ya. [Rieksts, J.], fotograf; LERKH, Yu.; FEDOSEYEV, B., fotograf; REYKHMAN, E., zasluzhennyy deyatel' kul'tury Latviyskoy SSR; GROBMAN, Ya. [Grobman, J.], fotograf; OZOLS, Ya. [Ozols, J.], fotograf; TIKNUS, B., fotograf; FADEYEV, Ye., fotograf; RAKE, I., fotograf; BERZTIS, A., fotograf; RAKE, K., fotograf; UPIT, V., fotograf; SHADKHAN, M., fotolyubitel'; RITERS, G., fotolyubitel'.

Organize a society of Soviet photographers! Sov.foto 18 no.4:77 Ap '58. (MIRA 11:6)

1.Rizhskaya kinostudiya (for Gaylis, Fedoseyev).3.AN Latviyskoy SSR (for Ridzenieks). 4.Chlen-korrespondent Akademii khudozhestv SSSR (for Kal'nynsh, E). 5.Zhurnal "Rigas foto" (for Rieksts, Gorman, Ozols). 6.Latviyskoye teatral'noye obshchestvo (for Lerkh). 7.Direktor Doma narodnogo tvorchestva imeni E. Melngaylisa (for Reykhman). 8.Predsedatel' Tvorcheskogo soveta (for Grobman). 9.Chlen Tvorcheskogo soveta (for Ozols). 10.Gazeta "TSinya" (for Tiknus). 11.Fotokhronika Latviyskogo telegrafnogo agentstva (for Fadeyev). 12.Institut Latgiproprom (for Rake, I.).

(Photography--Societies)

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