NOVIKOV, V. M., Cand Biol Sci -- (diss) "Action of some antibiotics on experimental staphyllococcus and Siberian ulcerous infections." Khar'kov, 1960. 15 pp; (Ministry of Agriculture Ukrainian SSR, Khar'kov Veterinary Inst); 200 copies; free; (KL, 17-60, 148)

FORTUSHNYI, V. A., NOVIKOV, V. M. (Candidates of Veterinary Sciences) and SHULYAK (Junior Scientific Co-Worker, Ukrainian Scientific Research Institute of Experimental Veterinary Medicine)

"To study and disseminate leading experience of animal breeders and veterinary specialists in the Ukrainian SSR"

Veterinariya, vol. 39, no. 7, July 1962, pp. 24

NOVIKOV, V.M., kand. veter. nauk; FORTUSHNYY, V.A., kand. veter. nauk; SHULYAK, V.D., mladshiy nauchnyy sotrudnik

Treatment of piglets infected with paratyphoid fever. Veterinariia 39 no.11:42-44 N '62. (MIRA 16:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

FORTUSHNYY, V.A., kand. veter. nauk; NOVIKOV, V.M., kand.veter. nauk

Elimination of undesirable microflora in the fermentation of native antibiotics. Veterinariia no.12:52-54 D '63. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

NOVIKOV, V.M. [Novykov, V.M.]

Effect of antibiotics on Bacillus anthracis in vitro. Mikrobiol. zhur. 25 no.5:67-70 '63 (MIRA 16:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii, Khar'kov.

NOVIKOV, V.M.; FORTUSHNYY, V.A.; SHULYAK, V.D.

Method of determining vitamin B_{12} using Escherichia coli.
Mikrobiologiia 32 no.2:319-322 Mr-Ap '63. (MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii, Khar'kov.

FORTUSHNYY, Vladimir Anisimovich; NOVIKOV, Vladimir Mitrofanovich; KALUGIN, Leonid Konstantinovich; GRECHKO, G.S.[Hrechko,H.S.], red.

[Prophylaxis of diseases in young farm animals; aid to veterinary specialists and stockbreeders] Profilaktyka khvorob molodniaka sil's'kohospodars'kykh tvaryn; na dopomohu veterynarnym spetsialistam i pratsivnykam tvarynnytstva. Kharkiv, Kharkivs'ke knyzhkove vyd-vo, 1964. 74 p. (MIRA 18:2)

FORTUSHNYY, V.A.; NOVIKOV, V.M., kand. veterin. nauk; SHULYAK, V.D., mladshiy nauchnyy sotrudnik

Study and propagate the advanced practices of livestock farmers and veterinary specialists in the Ukraine. Veterinariia 39 no.7:24-29 Jl '62. (MIRA 18:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

NOVIKOV, V.M., kand. veter. nauk; FORTUSHNYY, V.A., kand. veter. nauk; SHULYAK, V.D., mladshiy nauchnyy sotrudnik; GENGEROVSKAYA, V.K., veterinarnyy vrach

Accelerated indicator method for determining vitamin B_{12}. Veterinariia 42 no.5:106-108 My '65. (MIRA 18:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

NOVIKOV, V.M., kand.veter.nauk; FORTUSHNYY, V.A., kand.veter.nauk; [redacted]ROVSKAYA, V.K., veterinarnyy vrach

Sensitivity of the pathogen of swine erysipelas to antibiotics. Veterinariia 41 no.7:26-27 Jl '64. (MIRA 18:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

NOVIKOV, V.M., kand.veter.nauk

Methods for isolating a pure culture of the pathogen of swine erysipelas. Veterinariia 42 no.10:101-102 O '65.

(MIRA 18:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii.

CA

9

PROCESSES AND PROPERTIES INDEX

The use of water containing algae as a cooling liquid in the hardening of steel. V. I. Prosvirin and V. N. Novikov. *Vestnik Metalloprom.* **17**, No. 10, 92-101 (1937); *Chem. Zentr.* **1938**, II, 1851-2.—Expts. on the hardening of steel with an algae-contg. water emulsion as the quenching liquid indicated that the same values of hardness were obtained by quenching in such an emulsion as by quenching in oil. The emulsion has the advantage over oil of producing no smoke. It is also cheaper. M. G. Moore

METALLURGICAL LITERATURE CLASSIFICATION

ACC NR: AP6021717 (A) SOURCE CODE: UR/0237/66/000/003/0038/0045

AUTHOR: Novikov, V. M.

ORG: None

TITLE: Optical properties of thin films of materials in the vacuum ultraviolet spectrum range. A review.

SOURCE: Optiko-mekhanicheskaya promyshlennost', no. 3, 1966, 38-45

TOPIC TAGS: ultraviolet optic property, film light reflection coefficient, film light transmission coefficient, film ultraviolet reflectivity, film ultraviolet transparency, film ultraviolet property review, UV spectrum, UV optic material

ABSTRACT: The author reviews the literature on the optical properties of thin films of materials in the vacuum ultraviolet range of the spectrum. An important stimulus to the development of this domain was given by the short wave optical research in the cosmic space, made possible by the aid of rockets and sattelites. Requirements for simple, reliable and compact installations generated a need for better materials. 54 papers are reviewed, in three chapters, treating: 1) general aspects of optical materials, pointing out, e.g., the influence of age, exposure and surface perfection on the properties of films 2) materials for reflective coatings, 3) materials for transparent layers, noting, e.g., the work of R.W. Wood on the transperency to the UV of thin layers of Na and K, dating back to 1902 and 1917, and remaining unexplained till

UDC: 539.23:535-3

Card 1/2

ACC NR: AP6021717

the early thirties, 4) papers on the relationship between optical and photoelectric properties of thin films and the use of thin films for absorption and interference filters. The optical techniques of thin coatings are now basic for the research in the vacuum ultraviolet range of the spectrum. Author thanks doctor of physico-mathematical sciences G.A.Gurzadyan for his interest and valuable directives, and L.B. Khokhlova for aid in selecting material for this paper. Orig.art. has 11 figures.

SUB CODE: 20/ SUBM DATE: 02Mar65/ ORIG REF: 005/ OTH REF: 049

Card 2/2

L 37640-66

ACC NR: AP6011245 SOURCE CODE: UR/0413/66/000/006/0088/0088

INVENTOR: Gurzadyan, G. A.; Novikov, V. M. 16 B

ORG: none

TITLE: Preparation of a light filter. Class 42, No. 179961

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 88

TOPIC TAGS: light filter, ultraviolet spectrum

ABSTRACT: An Author Certificate has been issued for describing a method of preparing a light filter for the far-ultraviolet region of the spectrum by vacuum deposition of an alkaline metal on a plate-like transparent base. The deposited layer is covered with a second protective plate. To prevent oxidation of the alkaline metal deposit, the second plate is applied in vacuo; circular seals are inserted between both plates; the plates are compressed, and the space between them is made completely airtight. [LD]

SUB CODE: 20/ SUBM DATE: 30May64

Card 1/1 vmb UDC: 535.345.6

NOVIKOV, V.N.

E-1

USSR/Virology - Bacterial Viruses

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 68228

Author : Novikov, V.N.
Title : Comparative Characteristics of Different Methods of Typing Bacteriophages of Typhoid Fever.

Orig Pub : Zh. Mikrobiol., Epidemiol. i Immunnobiologiy, 1956 (1957), Edition, 37-38

Abstract : Phages, excreted from the patients' organism and from sewer and river waters, were typed by the serologic method and by the ability to lyse experimentally obtained phagoresistant cultures of secondary growth. It developed that the latter method is less exact than the serologic one; besides this, it was not always possible to isolate phagoresistant cultures. Mainly phages of Vi-type were secreted from sick individuals, while from external media we obtained complex Vi- and O-phages.

Card 1/1

- 7 -

Investigation of the electrical conductivity and dielectric permeability of semiconducting materials in the system of the oxides of manganese and cobalt. V. N. Novikov.

Physico-chemical investigation and electrical conductivity of cobalto-titanium oxide semiconductors. T. N. Yegorova, Ye. V. Kurlina, I. T. Sheftel'.

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

NOVIKOV, V.N., insh.

Unit for automatic ejection of filled flaskless molds on a shake-out screen. Mashinostroitel' no.2:21 F '60. (MIRA 13:5)

(Molding (Founding))

NOVIKOV, V.N.; SHAKHOV, L.B.

Accounting for standards in the institute. Standartizatsiia 27 no.10:35-36 O '63. (MIRA 16:11)

NAZAROVA, Z.N.; NOVIKOV, V.N.

Chemistry of 5-halofurans. Part 15: Reaction of the substitution of the halogen in 5-halo-2-nitrofurans. Zhur. ob. khim. 31 no.1: 263-267 Ja '61. (MIRA 14:1)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Furan)

NAZAROVA, Z.N.; NOVIKOV, V.N.; BUKHAYEVA, V.TS.

Interaction of 5-bromo-2-nitrofuran with amines. Zhur.ob.khim. 34 no.2: 705-706 F '64. (MIRA 17:3)

Novikov, V.N.

UTENKOV, V.F., kandidat tekhnicheskikh nauk; NOVIKOV, V.N., inzhener; BURKHIN, V.A., inzhener; DANILOV, N.N., kandidat tekhnicheskikh nauk, nauchnyy redaktor; KHOAK, B.A., redaktor izdatel'stva; VOLKOV, V.S., tekhnicheskiy redaktor

[Hardening concrete by the use of additives of calcium chloride under cold weather conditions] Tverdenie betona s dobavkami khloristogo kal'tsiia pri otritsatel'noi temperature. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1955. 39 p. [Microfilm] (MLRA 10:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii stroitel'stva.
(Concrete) (Lime, Chloride of)

TROSTIN, Ye.A., inzh.; KALININ, S.A., inzh.; KORENEVSKIY, M.V., inzh.; NOVIKOV, V.N., inzh.; DROBINSKIY, V.A., inzh., red. YUDZON, D.M., tekhn. red.

[Illustrated handbook for the locomotive engineer] Illiustrirovannoe posobie parovoznomu mashinistu. Moskva, Transzheldorizdat, 1963. 280 p. (MIRA 16:7)
(Locomotives—Handbooks, manuals, etc.)

NOVIKOV, V.N.

How we have increased the life of motor-armature bearings of ChS1 and ChS3 electric locomotive. Elek. i tepl. tiaga 7 no.3:12-13 Mr '63. (MIRA 16:6)

1. Glavnyy inzh. lokomotivnogo depo Moskva-Tekhnicheskaya.
(Electric locomotives)
(Bearings(Machinery))

RAKOV, Vitaliy Aleksandrovich; KALININ, S.S., inzh., retsenzent; SUSLOV, B.V., inzh., retsenzent; NAKHODKIN, M.D., kand. tekhn. nauk, retsenzent; FAMINSKIY, G.V., kand.tekhn. nauk, retsenzent; ROGOVA, Ye.N., inzh., retsenzent; KRYLOV, V.I., inzh., retsenzent; NOVIKOV, V.N., inzh., retsenzent; GORELIK, I.A., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Series ChS2 electric locomotive for passenger trains] Passazhirskii elektrovoz serii ChS2. Moskva, Transzheldorizdat, 1963. 359 p. (MIRA 17:1)

E 31529-66 EWT(m)/EWP(j) WW/JW/RM

ACC NR: AP6008866 SOURCE CODE: UR/0366/65/001/011/2022/2028

AUTHOR: Novikov, V. N.; Nazarova, Z. N.

ORG: None

TITLE: Sulfides, ethers, and amines of the nitrofuran series

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 11, 1965, 2022-2028

TOPIC TAGS: sulfide, ether, amine, organic nitro compound

ABSTRACT: The exchange of bromine in 5-bromo-2-nitrofuran (II) for oxygen-, sulfur-, and nitrogen-containing groups was investigated. When (II) was reacted with 5-mercapto-furfural, 5-mercapto-2-acetofuran, 2-mercaptobenzimidazole, and thiosalicylic acid in alkaline media, the corresponding ethers were obtained. When it was reacted with secondary amines, the corresponding tertiary amines of the nitrofuran series were produced, and their UV and IR spectra were recorded. 2-Nitro-5-furyl-2'-benzimidazolyl sulfide was isolated in two crystalline modifications. The reaction of (II) with ethylamine and methylamine was followed spectrophotometrically and was found to proceed in abnormal fashion: the colored intermediate which is first formed disappears in the course of the reaction. Attempts to isolate the products resulting from the reaction of (II) with primary amines led to tarring of these products. Orig. art. has: 3 figures and 2 tables.

SUB CODE: 07 / SUBM DATE: 16Jul64 / ORIG REF: 009 / OTH REF: 008

UDC: 547.722.723+541.69

Card 1/1 LC

DOROFEYENKO, G.N.; SHELEPIN, O.Ye.; NAZAROVA, Z.N.; NOVIKOV, V.N.; TIKHONOVA, G.P.

Condensation of 1-methyl-3-phenyl-5,6,7,8-tetrahydroisochromylium perchlorate aldehydes of the aromatic and heterocyclic series. Zhur. ob. khim. 35 no.3:570-574 Mr '65. (MIRA 18:4)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

KUDRYAVTSEV, I.V., kandidat tekhnicheskikh nauk; NOVIKOV, V.N., inzhener.

Investigation of the strength of surface-hardened steel subjected to cyclic loads. Vest.mash.27 no.7:1-12 Jl '47. (MLRA 9:4)
(Strength of materials) (Steel--Testing)

NOVIKOV, V. N. and RYABCHENKOV, A. V.

"Corrosion-Fatigue-Strength of Surface-Hardened Steel," Mashgiz, Moscow, 1950.

NOVIKOV, V.N.

Fatigue strength surface hardened steel. [Izdaniia] LONITOMASH no.30:285-298 '52. (MLRA 8:1)
(Steel--Hardening)

NOVIKOV, V. N., Engr

"Electrical Heat Treatment of Rolls for Cold Rolling." Cand Tech Sci, Central Sci-Res Inst of Technology and Machine Building (TSNIITMASH), 6 Dec 54. (VM, 26 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

NOVIKOV, V.N., kandidat tekhnicheskikh nauk.

Effect of surface hardening by heating with commercial frequency currents on the properties of work rolls for cold rolling. Metalloved. i obr. met. no.6:36-47 Je '56. (MLRA 9:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.
(Metals--Hardening) (Rolls (Iron mills))

NOVIKOV, Vladimir Nikolayevich; IVANOV, Georgiy Petrovich; SAVUKOV, Vladimir Pavlovich; BARKSTOVOY, Ye.I., inzhener, redaktor; BOBROVA, Ye.N., tekhnicheskiy redaktor

[Electric spark hardening of locomotive parts; practices of the Moscow depot of the Moscow-Kursk-Donbass railroad] Elektroiskrovoe uprochnenie detalei parovozov; opyt depo Moskva Moskovsko-Kursko-Donbasskoi dorogi. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 50 p. (MLRA 10:7)

(Locomotives--Repairs) (Electric spark)

SOV/137-58-11-22973

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 163 (USSR)

AUTHOR: Novikov, V. N.

TITLE: Local Heat Treatment of Welding Seams of Bulky Articles by Means of Electric Heating (Mestnaya termicheskaya obrabotka svarnykh soyedineniy krupnogabaritnykh izdeliy s primeneniyem elektronagreva)

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty, Riga, 1957, pp 184-193

ABSTRACT: The induction heating is accomplished with an apparatus which has the following technical characteristics: Power 215 kw, width of the zone of heating above the Ac_3 point 250 mm, heating temperature ~ 1000°C during normalizing and 650° during tempering, voltage 190 v, current density 15 amp/mm^2. The effect of various heat-treatment procedures on the structure and mechanical properties of welding joints was investigated. The work was carried out on specimens cut out of various spots on the welding seam of full-scale 200x1700x30,000 mm 22K steel plates and 200x500x1400 mm experimental plates. To diminish the loss of heat during electrical heating, the welding zones were covered with sheet asbestos. The heating temperature was

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Local Heat Treatment of Welding Seams of Bulky Articles (cont.)

controlled by thermocouples welded onto various areas of the welding seam. It is established that the structure upon electrical heating (normalization) and the mechanical properties of the articles heated electrically (normalized) are similar to those resulting from furnace treatment. The following procedure is recommended for the electrical heating of 22K steel: normalizing within the 960 - 1000° range, heating cycle including the leveling off of the temperature 50 hours, annealing at 600 - 660°, soaking for 2 hours, cooling rate (under a layer of asbestos) in the 1010 - 800° temperature range - 250°/hour, in the 800 - 400° range 100°/hour and in the 400 - 200° range 35°/hour. The above-described technique for heat treatment of bulky plates eliminates warping and straightening and decreases the electric energy consumption by amout 95 percent as compared with treatment in furnaces.

A. B.

Card 2/2

NOVIKOV, V.N., kandidat tekhnicheskikh nauk.

Effect of residual stresses on the contact fatigue strength of rolls used in cold rolling. Metalloved.i obr.met.no.1:43-50 Ja '57. (MLRA 10:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroeniya.
(Rolls (Iron mills)--Testing) (Steel--Fatigue)

Nov/Nov V.M.

25(1) PHASE I BOOK EXPLOITATION SOV/1891

Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Elektrotermicheskaya obrabotka i elektroiskrovoye uprochneniye detaley; [sbornik] (Electric Heat Treatment and Electrospark Hardening of Parts; Collection of Articles) Moscow, Mashgiz, 1958. 214 p. (Series: Its: [Trudy] kn. 89) Errata slip inserted. 5,600 copies printed.

Ed.: I.Yu. Miloslavskiy, Engineer (Deceased); Ed. of Publishing House: I. Yu. Geller; Tech. Ed.: A. F. Uvareva; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): K.A. Ponomareva, Engineer.

PURPOSE: This collection of articles is intended for engineering staffs of plants and scientific research institutes dealing with electric heating, electric heat-treatment, and electrospark hardening of metals.

COVERAGE: This collection of articles presents the results of scientific research work carried out by the Department of TsNIITMash (Central Scientific Research Institute of Technology and Machinery) on electric heating in the field of high

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Electric Heat Treatment (Cont.)

and industrial-frequency heating and electrospark hardening of machine parts. The process of surface hardening, through hardening and tempering of steel and cast iron using induction-heating and electrospark methods, and the results of investigation of the effects of electric-heat treatment and electrospark hardening on the properties of steel and cast iron are described. A brief review of industrial applications of induction heating outside the Soviet Union are also presented. Various electric-heating and electrospark hardening equipment developed by TsNIITMash are described. The book was written for the 20th anniversary of the scientific research work of TsNIITMash, Department of Electric Heating.

TABLE OF CONTENTS:

metals, and development of new equipment and modernizing old types of equipment and apparatus.

water by oil, and by other milder cooling agents, and the effect of the duration and the temperature of annealing are also discussed.

Klimochkin, M.M., Engineer. Surface Hardening of Nodular Cast Iron 87
The author presents the results of investigations on nodular cast iron heated for hardening by high frequency (300,000 to 350,000 cycles) current. He describes the structure and hardness of the surface, wear resistance, fatigue strength, and resistance to crack formation, and gives recommendations as to how to meet all these quality requirements.

Bogatyrev, Yu.M., and S.M. Gamazkov, Candidates of Technical Sciences. 116
Electric Tempering of Surface-hardened Parts by Sectional Heating
The article deals with the following: distribution of temperature along and across specimens during electrical heating, the hardness of specimens after surface hardening and induction tempering, the structure of the hardened layer, and the residual stresses in it. The author compares the data obtained with results from the common method of heating specimens in a furnace and he stresses the pronounced advantages of induction heating.

Electric Heat Treatment (Cont.) SOV/1891

The author describes construction of two apparatus, the IAS-2M and IAS-3M developed by TsNIITMash for electrospark hardening of steel surfaces. Technical specifications for both are given, and directions for operating the machines and results that can be obtained with them are included.

AVAILABLE: Library of Congress

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Card 8/8

129-58-8-8/16

AUTHORS: Novikov, V. N., Tutov, I. Ye., Candidates of Technical Science and Kondrashev, A. I., Engineer

TITLE: Local Heat Treatment of Weld Joints Manufactured by Electric Slag Welding (Mestnaya termicheskaya obrabotka svarnykh soyedineniy, vypolnennykh elektroshlakovoy svarkoy)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 8, pp 38-43 (USSR)

ABSTRACT: The single-pass electric slag welding of 100-400 mm thick components developed by the imeni Ye. O. Paton Welding Institute (Institut svarki imeni Ye. O. Patona) is widely used in Soviet industry. However, the heat treatment of large components (normalisation annealing and high temperature tempering), which has to be carried out if they are to be highly stressed in service, involves serious technological difficulties. TsNIITMASh and NKMZ investigated the problems involved in the process of electro-heat treatment of welded joints of very large (100 ton) sheets of the Steel 22K. The sheets were butt welded with a wire electrode using a slag method. 50 c.p.s. current was used which ensures a relatively

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Local Heat Treatment of Weld Joints Manufactured by Electric Slag Welding

low speed and a high degree of uniformity of heating the plate along the cross section. The width of the zone which became heated to a temperature above the Ac_3 point was 2.5 times as high as the width of the weld; beyond this zone the heating was effected as a result of the thermal conductivity of the material. The induction equipment ensured local heating of the weld by means of a group of flat single-phase multi-turn 50 c.p.s. inductors which were connected into a three-phase system; the heating was effected simultaneously from both sides along the entire length of the weld. The inductors are fitted into two revolving frames and are pressed onto the plate by means of pneumatic or hydraulic devices. The induction equipment had a rating of 700 kVA. In Fig.1 the changes are graphed of the mechanical properties of the Steel 22K as a function of the heating temperature on the basis of experiments made by heating in the furnace at temperatures of 650 to 1050°C with a holding time of four hours at each temperature. The temperature

Card 2/5 range 700-800°C proved to be the most dangerous one; the

Local Heat Treatment of Weld Joints Manufactured by Electric Slag Welding

yield point of the steel is reduced by such a heating and subsequent tempering at 600°C to 4-6 kg/mm^2. The best combination of mechanical properties is obtained in the case of normalisation annealing at 870 to 950°C. Since this steel is not prone to over-heating, induction heating in the weld up to 1050°C is considered admissible. Relaxation tests of the normalised steel showed that tempering at 650°C during 1 to 2 hours conserves the required mechanical properties of the normalised steel whilst eliminating almost entirely the residual stresses. The applied control equipment enabled achieving a full equalisation of the temperature throughout the entire thickness of the plate along the weld seam. The described investigations of the seam metal and the thermally affected zone allows the following conclusions to be made:

1) Normalisation annealing restores the over-heated coarse crystalline structure of the weld obtained during electric slag welding which leads to an improvement of the ductility of the steel. Irrespective of the method

Local Heat Treatment of Weld Joints Manufactured by Electric Slag Welding

of heating after normalisation and tempering, the metal of the weld and of the near-weld zone will have a strength and mechanical characteristics equal to that of the base metal.

2) The most rational type of heating for normalisation annealing of the metal in the case of welds of large size plates is local induction heating by 50 c.p.s. current.

3) Local electro-thermal treatment of welded plates of the Steel 22K containing at least 0.22% carbon ensures obtaining mechanical properties which are in accordance with the requirements to be met by this sheet material.

The described new technology of heat treatment has been successfully introduced and is recommended for weld joints of tubes and steam pipings, high pressure vessels and various other components. If it is necessary to eliminate more fully the residual stresses in the welded component by high temperature tempering in the case of heating in furnaces, application of local electro-thermal treatment (normalisation) is rational and efficient for welds produced by electric slag welding since it excludes

Local Heat Treatment of Weld Joints Manufactured by Electric Slag Welding

warping and the necessity of straightening of the welded components as is necessary during heating to high temperatures inside furnaces.
There are 5 figures, 1 table.

ASSOCIATIONS: TsNIITMASh and NKMZ

1. Welded joints--Heat treatment 2. Welded joints--Properties
3. Welded joints--Test results

Card 5/5

NOVIKOV, V.N., kand.tekhn.nauk; BOGATYREV, Yu.M., kand.tekhn.nauk

Research in the field of electric heating and electic heat treatment. [Trudy] TSNIITMASH 89:5-17 '59. (MIRA 12:4)
(Induction heating) (Metals--Heat treatment)
(Metallurgical research)

NOVIKOV, V.N., kand.tekhn.nauk

Investigating properties and durability of electrically hardened rolls for could rolling. [Trudy] TSNIITMASH 89:42-69 '59.
(MIRA 12:4)

(Rolls (Iron mills)--Testing) (Case hardening)

NOVIKOV, V.N.; NAZAROVA, Z.N.

Sulfides, ethers, and amines of the nitrofuran series.
Zhur. org. khim. 1 no.11:2022-2028 N '65.
(MIRA 18:12)

1. Submitted July 16, 1964.

NAZAROVA, Z.N.; NOVIKOV, V.N.

Basicity of the furan ring. Zhur. ob. khim. 34 no. 3:767-768 Mr '64. (MIRA 17:6)

NOVIKOV, V.N.; TOLSTOV, L.K.; SEREBRYAKOVA, Ye.K.; SOKOLOV, B.M.; Prinimal uchastiye: Melent'yev, Yu.I.; KAPGER, V.S.; ZORCHENKO, I.P.; KARPOV, K.F.; Kushnarenko, V.S.; SHEVCHENKO, L.I.; TRIFONOVA, N. I.; PODZHUNAS, V.A.; MASLITSKAYA, M.P.

Obtaining industrial naphthalene from the centrifugal naphthalene of the Gubakha Coke and Coal Chemicals Plant. Koks i khim. no.8: 35-38 '62. (MIRA 17:2)

1. Vostochnyy uglekhimicheskiy institut (for Novikov, Tolstov, Serebryakova). 2. Gubakhinskiy koksokhimicheskiy zavod (for Sokolov).

DOROFEYENKO, G.N.; KARBAN, V.I.; DULENKO, L.V.; NOVIKOV, V.N.

Synthesis of some ketones in the furan and thiophene series. Izv. vys. ucheb. zav.; khim. i khim. tekh. 7 no.3:432-436 '64. (MIRA 17:10)

1. Rostovskiy-na-Donu gosudarstvennyy universitet, kafedra khimii prirodnykh i vysokomolekulyarnykh soyedineniy.

DOROFEYENKO, G.N.; NAZAROVA, Z.N.; NOVIKOV, V.N.

Reaction of benzylidene and furfurylidene diacetophenone with acetyl perchlorate. Zhur. ob. khim. 34 no.12:3918-3921 D '64 (MIRA 18:1)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.

L 52319-65 EPF(c)/EWP(j)/EWT(m)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5011239 UR/0303/65/000/002/0018/0021 35 B

AUTHOR: Bogacheva, Ye. K.; Novikov, V.N.; El'tekov, Yu. A.

TITLE: Adsorption of polymers on fillers and pigments

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 2, 1965, 18-21

TOPIC TAGS: polymer adsorption, adsorption isotherm, filler, pigment, polydimethylsiloxane, polyneopentyl phthalate, channel black, rutile, silica powder

ABSTRACT: The paper describes the adsorption of polydimethylsiloxane (PDMS) and polyneopentyl phthalate (PNPP) from dilute solutions of pigments and fillers. The PDMS was supplied by A.S. Novikov (NII RP), and the PNPP by the GIPI-4. Nonporous Aerosil (silica powder), pigmentary rutile, and channel black with variously modified [illegible] the fillers. Adsorption isotherms of PDMS and PNPP are given [illegible] of the kinetics of

influence on the adsorption of PDMS and H

Card 1/2

L 52319-65

ACCESSION NR: AP5011239

Orig. art. has: 6 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 007 OTHER: 002

Card 2/2

L 07156-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AT7001028 SOURCE CODE: UR/0048/66/030/001/0162/0166

SYCHIKOV, G. I., KOVRIGIN, O. D., LATYSHEV, G. D., LONDARENKO, G. A., and NOVIKOV, V. N.

"Conversion Electron Spectrum of an Iridium Fraction" (Paper presented at the 2nd All-Union Symposium on the Physics of Thin Ferromagnetic Films; Irkutsk, 10-15 July 1964)

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaiya (Bulletin of the Academy of Sciences USSR: Physics Series), Vol 30, No 1, Jan 1966, pp 162-166

Abstract: A large double-focussing magnetic beta spectrometer was used to study the iridium fraction of a gold target irradiated with 660 Mev protons at the Joint Institute of Nuclear Studies. The energies and relative intensities of the conversion lines of Ir^{189} and Ir^{190} are tabulated. Lines were observed for Ir^{188}, Ir^{189}, Ir^{190}, and Ir^{193} but not for Ir^{192}, which fact is explained as due to the weakness of the source. The effects on the spectrum of traces of Re^{183} and Pt^{188} are discussed. The multipolarity of transitions 180.5, 147.0, 185.9, 197, and 233.5 kev was determined. Results, in general, agree with available data. Orig. art. has: 4 figures and 4 tables. [JPRS: 35,435]

ORG: none

TOPIC TAGS: conversion electron spectrum, iridium
SUB CODE: 20,18 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 002
Card 1/1 mjf 0924 0030

CA 21

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Low-temperature carbonization of Chelyabinsk coals. I. Ya. Postovskii and V. M. Nazikov. *Khim. Tverdogo Topliva* 4, 266-72(1933); cf. following abstr.—The compn. of Chelyabinsk coals and the yields and compns. of various products obtained by low-temp. carbonization are given. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CASES

PROCESSES AND PROPERTIES INDEX

Operation of the carbonization retorts at Kémérovo. I. Ya. Postovskii and V. N. Novikov. *Coke and Chem.* (U. S. S. R.) 4, No. 5-6, 57-63(1954); *Chimie & industrie* 33, 500-07; cf. C. A. 28, 6273ᵃ.—A discussion of the nature and quality of the coke produced at Kémérovo, and more particularly of its heterogeneity, and means of obtaining greater homogeneity and a higher yield of better-quality tar. A. Papineau-Couture

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

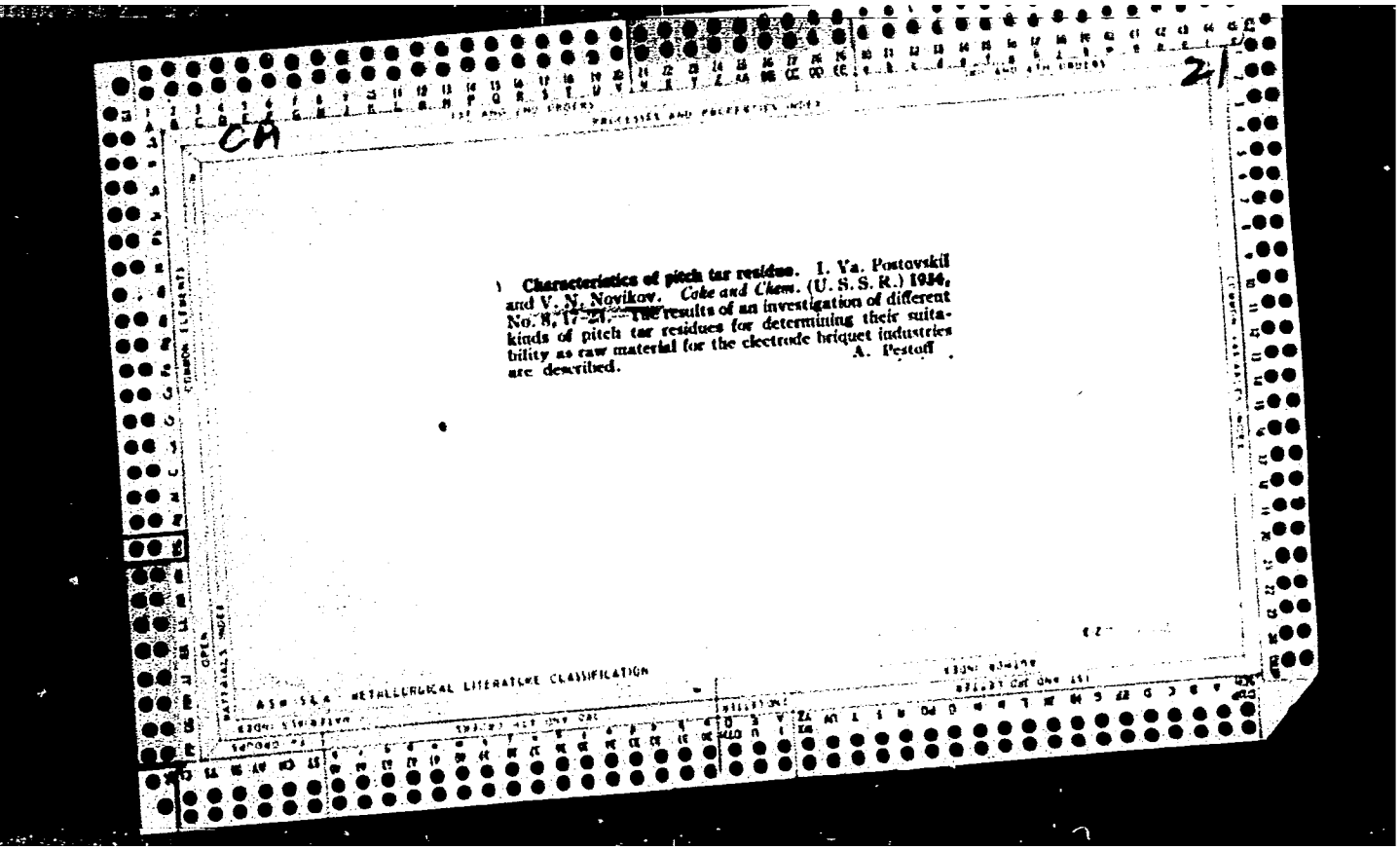
3RD AND 4TH ORDERS

CA

21

The content of low-boiling phenols in the Chelyabinsk primary coal tars. I. Ya. Postovskii, V. N. [illegible] and S. A. Olimskikh. *Coke and Chem.* (U. S. S. R.) 6, No. 11, [illegible](1954).—A yield of 9% PhOH and cresols was obtained from the benzene and [illegible] fractions of 3 different samples of brown-coal tars. Chas. Blanc

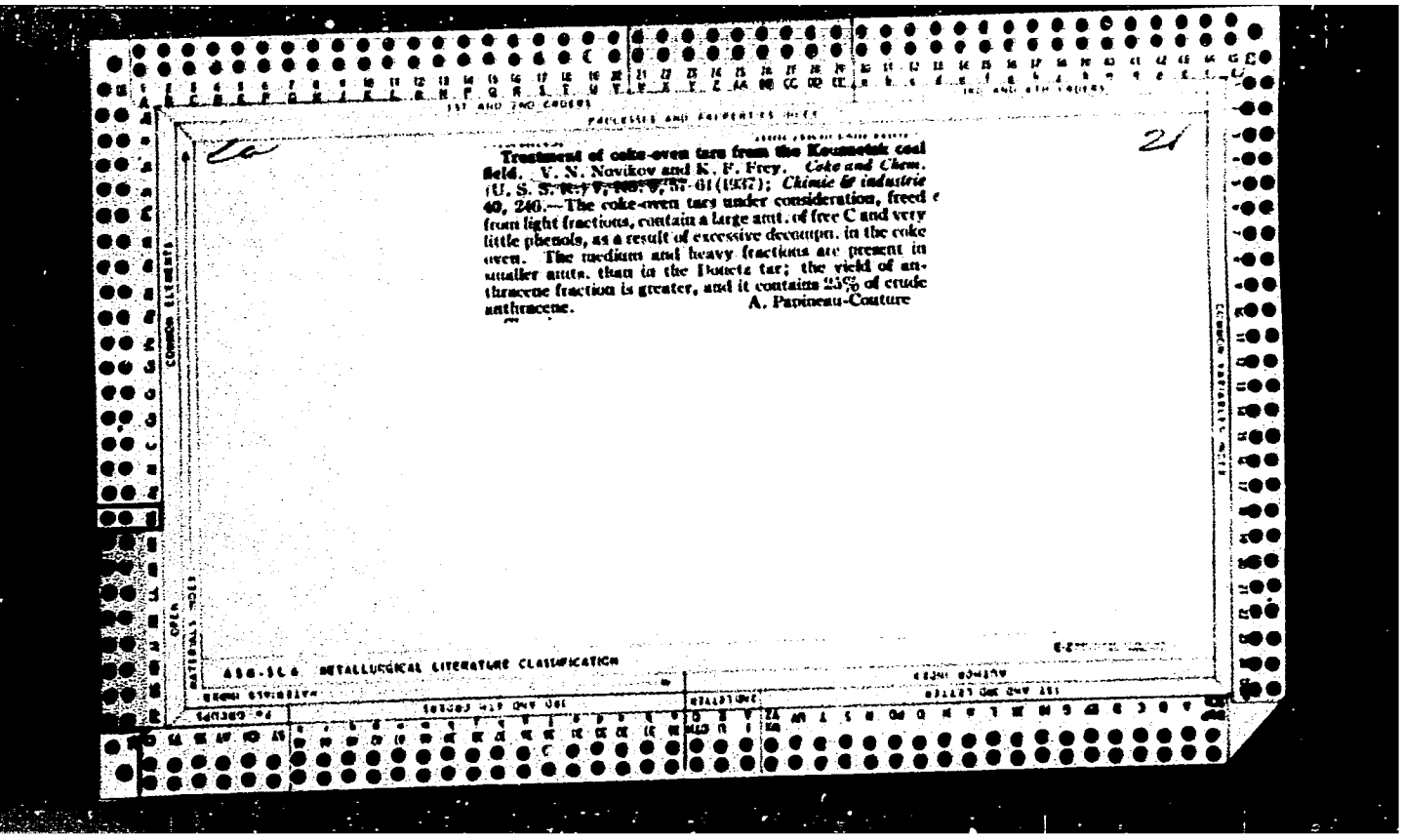
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

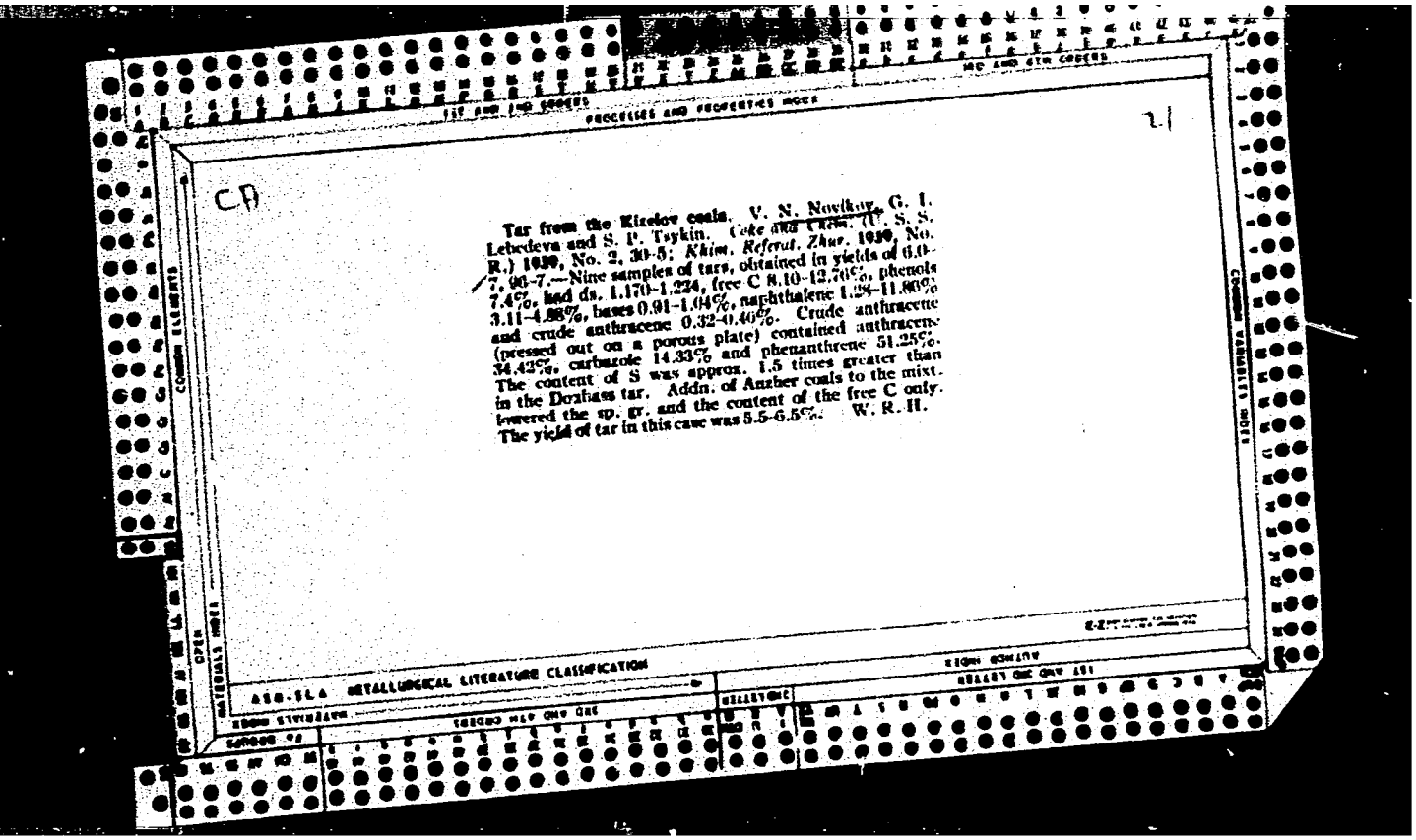
21

Characteristics of pitch tar residue. I. Ya. Postovskii and V. N. Novikov. *Coke and Chem.* (U. S. S. R.) **1934**, No. 8, 17–21.—The results of an investigation of different kinds of pitch tar residues for determining their suitability as raw material for the electrode briquet industries are described. A. Pestoff



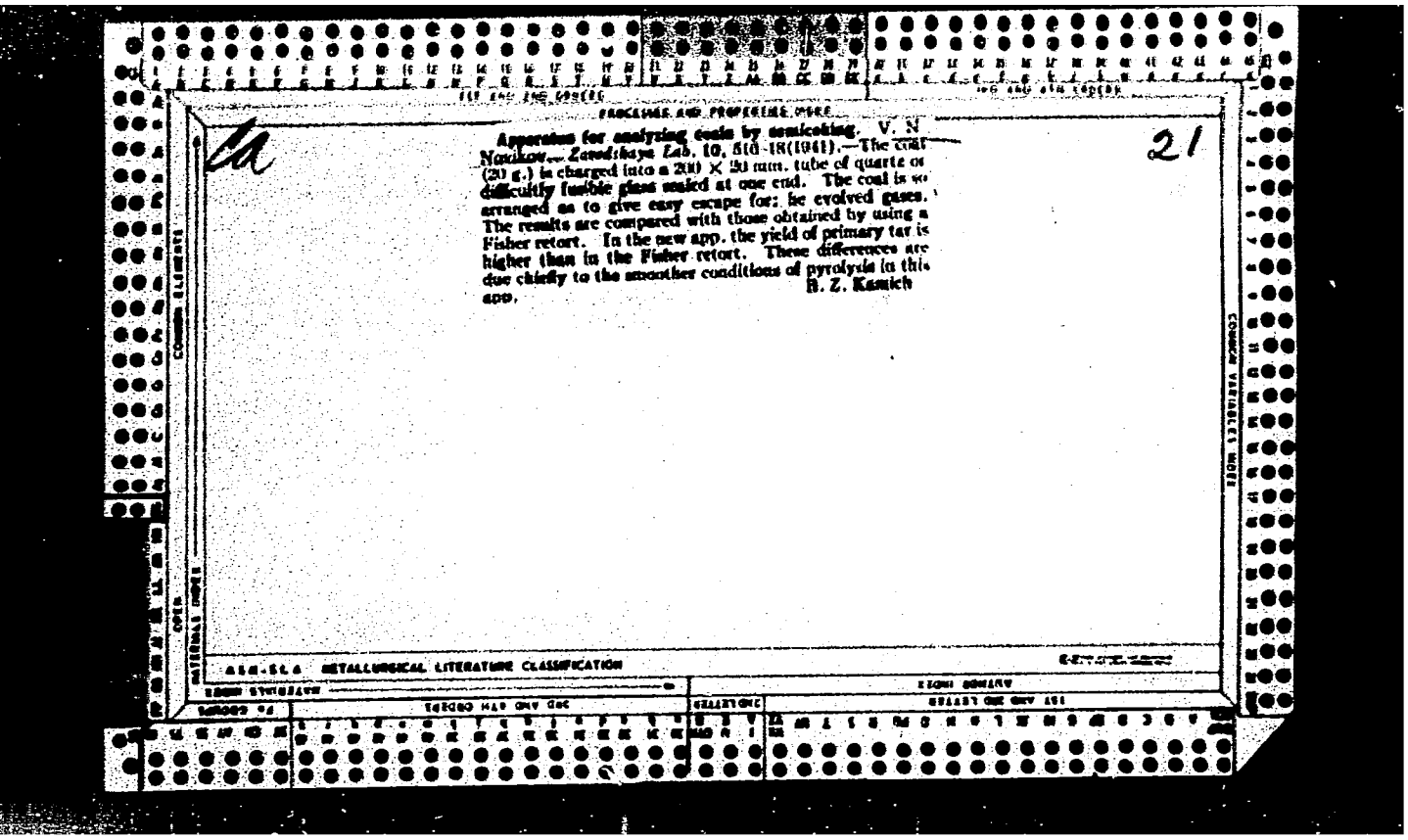
Treatment of coke-oven tars from the Kuznetsk coal field. V. N. Novikov and K. F. Frey. *Coke and Chem.* (U. S. S. R.) 7, 165-9, 177-81 (1937); *Chimie & industrie* 40, 246.—The coke-oven tars under consideration, freed from light fractions, contain a large amt. of free C and very little phenols, as a result of excessive decompn. in the coke oven. The medium and heavy fractions are present in smaller amts. than in the Donets tar; the yield of anthracene fraction is greater, and it contains 25% of crude anthracene.

A. Papineau-Couture



CA

Tar from the Kizelov coals. V. N. Novikov, G. I. Lebedeva and S. P. Tsykin. *Coke and Chem. (U. S. S. R.)* **1939**, No. 2, 30-5; *Khim. Referat. Zhur.* **1939**, No. 7, 93-7.—Nine samples of tars, obtained in yields of 6.0-7.4%, had ds. 1.170-1.224, free C 8.10-12.70%, phenols 3.11-4.98%, bases 0.91-1.04%, naphthalene 1.24-11.80% and crude anthracene 0.32-0.46%. Crude anthracene (pressed out on a porous plate) contained anthracene 34.42%, carbazole 14.33% and phenanthrene 51.25%. The content of S was approx. 1.5 times greater than in the Donbass tar. Addn. of Anzher coals to the mixt. lowered the sp. gr. and the content of the free C only. The yield of tar in this case was 5.5-6.5%. W. R. H.



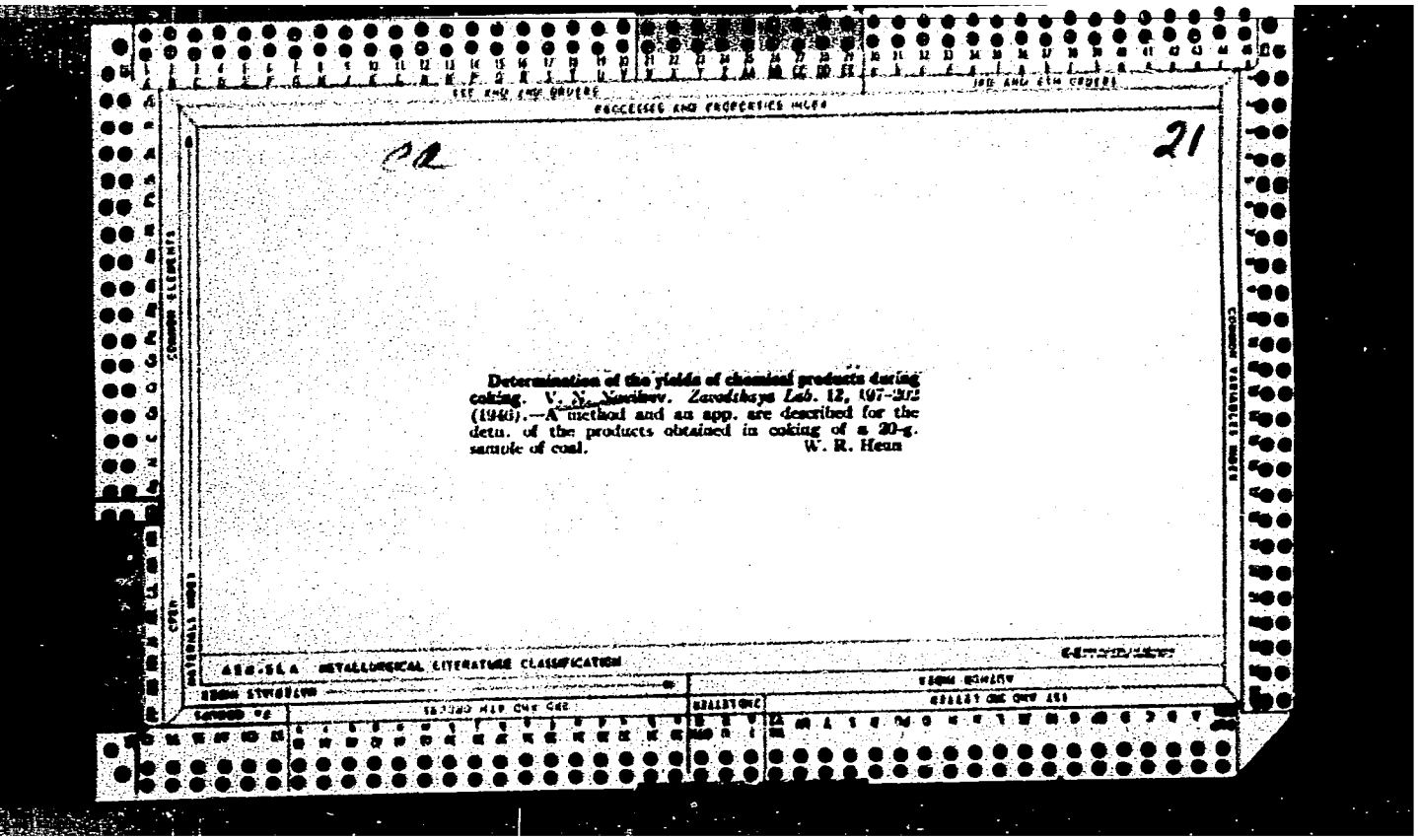
PROCESSES AND PROPERTIES INDEX

12a

21

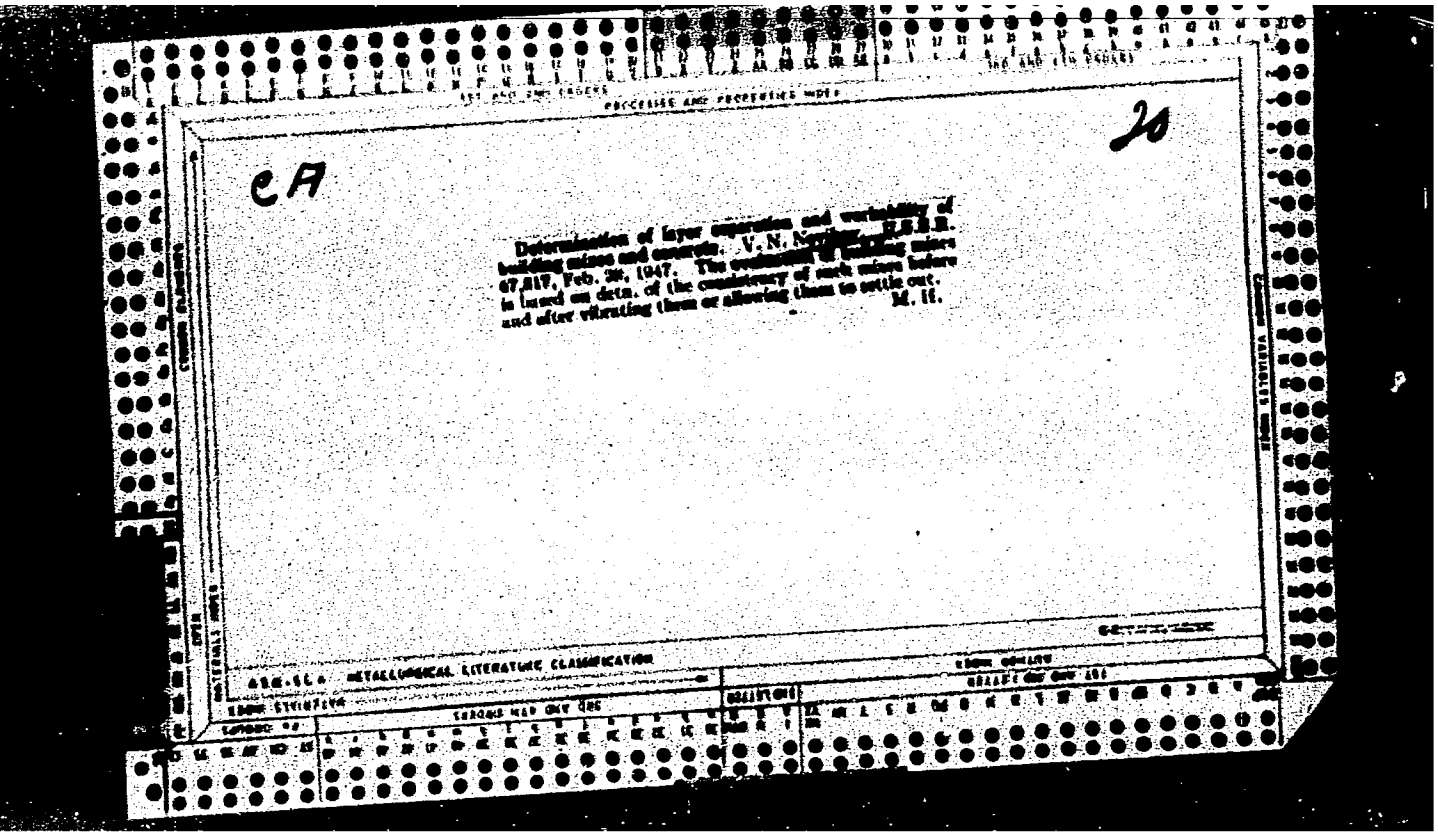
Apparatus for analyzing coals by semicoking. V. N. Nenikov. *Zavodskaya Lab.* 10, 516–18(1941).—The coal (20 g.) is charged into a 200 × 30 mm. tube of quartz or difficultly fusible glass sealed at one end. The coal is so arranged as to give easy escape for the evolved gases. The results are compared with those obtained by using a Fisher retort. In the new app. the yield of primary tar is higher than in the Fisher retort. These differences are due chiefly to the smoother conditions of pyrolysis in this app.
B. Z. Kamich

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



21

Determination of the yields of chemical products during coking. V. V. Smirnov. *Zavodskaya Lab.* 12, 197–202 (1946).—A method and an app. are described for the detn. of the products obtained in coking of a 20-g. sample of coal. W. R. Heun



USSR/Fuel - Coal
Coke Mar 50

"Laboratory Method for Determination of Yields and Quality of Coke By-Products," V. N. Novikov, M. A. Gruzdeva, Eastern Sci Res Coal-Chem Inst, 8 pp

"Zavod Lab" Vol XVI, No 3

Develops methods which show good results in comparison with production data. Special retort for coal coking has been designed, in which pyrolysis chamber is directly connected with coking chamber. Method offers possibility of classifying coals as to yields and quality of chemical products obtained by any coking method now used.

159T32

MOVIKOV, V. N.

177T30

USSR/Chemistry - Coal Mar 51

"Application of the Method of Dispersion in Anthracene Oil for Characterization of the Properties of Unprocessed and Heated Coals," V. N. Movikov, Eastern Coal Chem Inst

"Zhur Prik Khim" Vol XXIV, No 3, pp 314-324

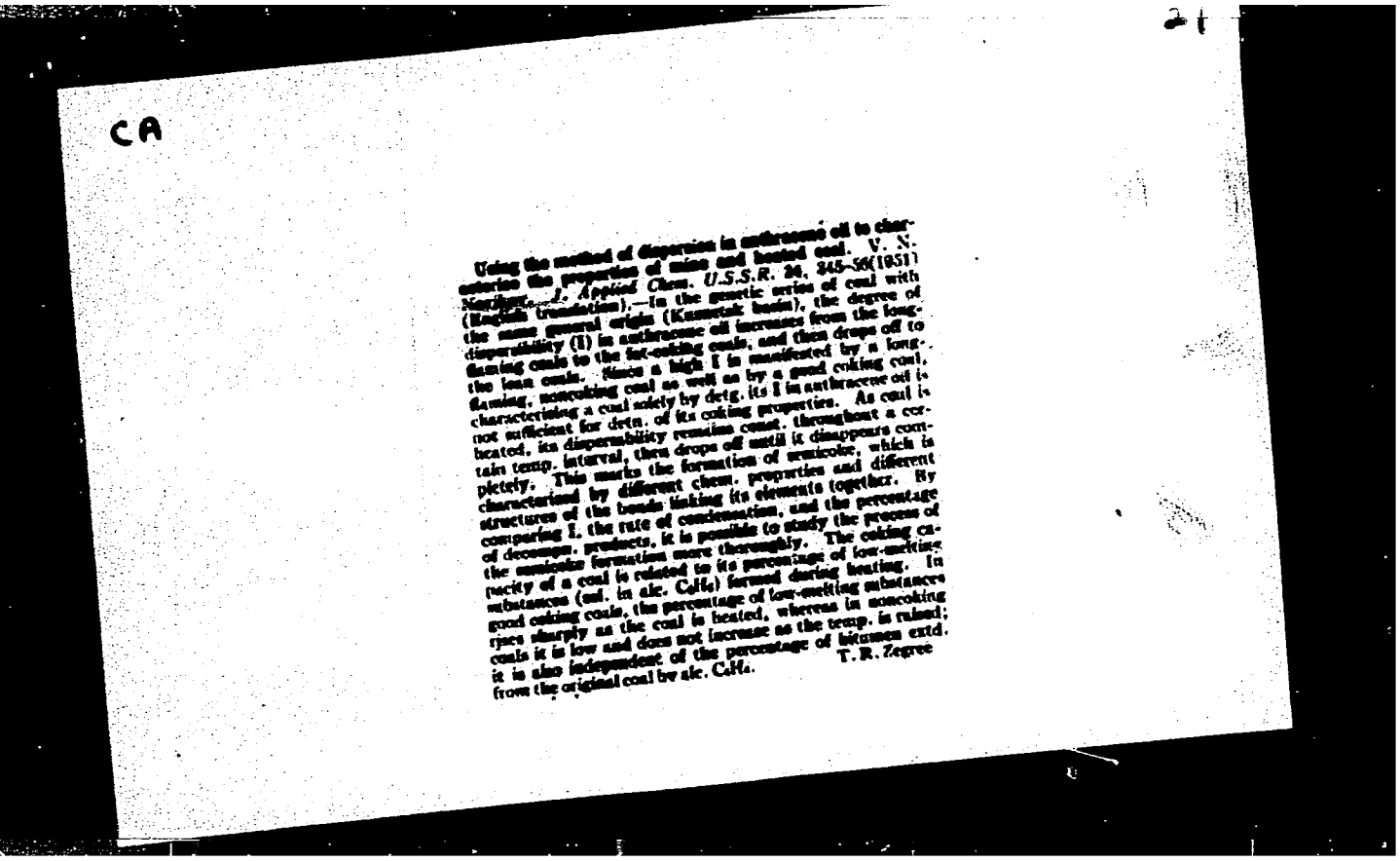
Explains change of coking coals into plastic state when heated at 300-450° as conversion of some components into liquid phase and colloidal dispersion in latter of other solid components. Investigation based on expt with dispersion of both unprocessed and heated samples of different coals

177T30

USSR/Chemistry - Coal (contd) Mar 51

from Kuznetsk, Karaganda, Kizel(ov-sk). Relates behavior of coals in this respect to results obtained in distn (yields of water, tar, gas, etc).

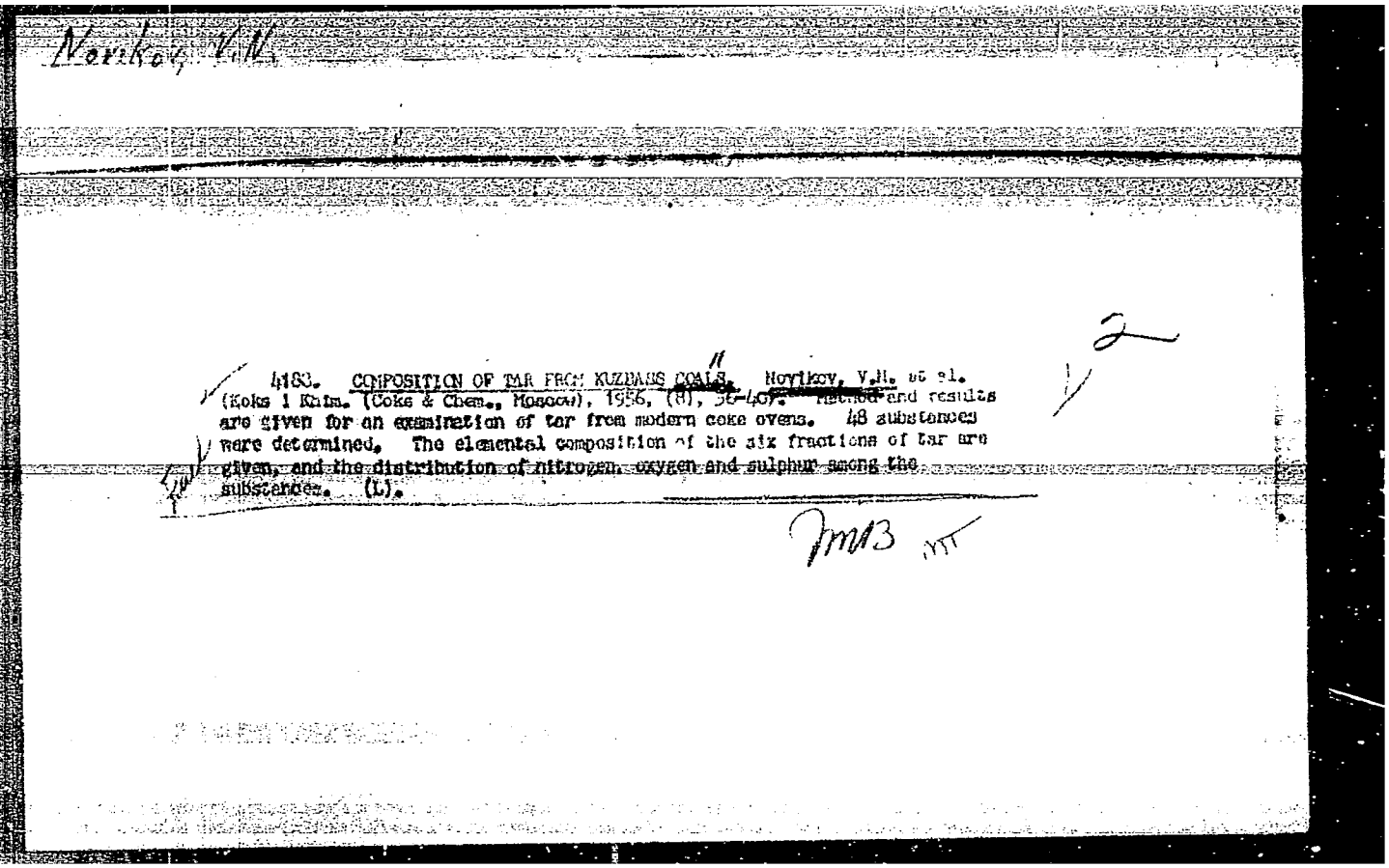
177T30



CA

Using the method of dispersion in anthracene oil to characterize the properties of mine and heated coal. V. N. Nesterov. *J. Applied Chem. U.S.S.R.* 24, 345-56(1951) (English translation).—In the genetic series of coal with the same general origin (Kamenzk basin), the degree of dispersibility (I) in anthracene oil increases from the long-flaming coals to the fat-coking coals, and then drops off to the lean coals. Since a high I is manifested by a long-flaming, noncoking coal as well as by a good coking coal, characterizing a coal solely by detg. its I in anthracene oil is not sufficient for detn. of its coking properties. As coal is heated, its dispersibility remains const. throughout a certain temp. interval, then drops off until it disappears completely. This marks the formation of semicoke, which is characterized by different chem. properties and different structures of the bonds linking its elements together. By comparing I, the rate of condensation, and the percentage of decompn. products, it is possible to study the process of the semicoke formation more thoroughly. The coking capacity of a coal is related to its percentage of low-melting substances (sol. in alc.-C_6H_6) formed during heating. In good coking coals, the percentage of low-melting substances rises sharply as the coal is heated, whereas in noncoking coals it is low and does not increase as the temp. is raised; it is also independent of the percentage of bitumen extd. from the original coal by alc.-C_6H_6.

T. R. Zegree



Novikov, V.N.

4183. COMPOSITION OF TAR FROM KUZBASS COALS. Novikov, V.N. et al. (Koks i Khim. (Coke & Chem., Moscow), 1956, (8), 36-40). Method and results are given for an examination of tar from modern coke ovens. 48 substances were determined. The elemental composition of the six fractions of tar are given, and the distribution of nitrogen, oxygen and sulphur among the substances. (L).

NOVIKOV, V. N.

32-8-47/61

AUTHOR NOVIKOV, V.N., GUREVICH, B.S.

TITLE Apparatus for the Rectification of the Fractions of Coal Pitch.
(Apparatura dlya rektifikatsii fraktsiy kamennougol'noy smoly.- Russian)

PERIODICAL Zavodskaya Laboratoriya 1957, Vol 23, Nr 8, pp 993-995, (U.S.S.R.)

ABSTRACT In the paper a new construction of the apparatus for the separation of the single fractions from the coal pitch is suggested in order to determine the composition of the latter. It consists of a boiler of 5 l contents which is fixed on a stand. The boiler has a conical cover which ends in a supporting box and on the side has a connection for manometers. All is enclosed in a container. Under the boiler there is the main electro-heater. An additional heater is provided at the sidewall of the boiler. On top of the support of the boiler there is a column which is fixed by special devices in its vertical position. This column which is of 30 mm diameter, is filled with 3 mm- and 0,5 mm rings. This ring column is divided into sections of 150 mm height each, between them a net cone is fixed with its peak directed downwards. Thus it is obtained that the liquid is directed from the on cone to the other inside

CARD 1/2

5(3)

SOV/80-32-3-29/43

AUTHORS: Novikov, V.N., Gurevich, B.S.

TITLE: The Dissolution of Coal in Coal Oils With the Purpose of Obtaining Coal Oil Pitch (Rastvoreniye ugley v kamennougol'nykh maslakh s tsel'yu polucheniya uglemaslyanogo peka)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 628-636 (USSR)

ABSTRACT: The optimum conditions for dissolving coals of various types in oil are investigated here. The types of coal studied are all mined in the Eastern part of the USSR (Table 1). The solvents used are: soft pitch with a softening temperature of 48°C, pitch tar, pitch distillate, the second anthracene fraction, etc (Table 2). The best results are obtained with gas and fat coal, the yield of which is 92% of the soluble part [Ref. 6, 9]. The heavy solvents produce a homogeneous pitch which is hard and brittle and has only a low content of volatile matter. The light solvents produce an elastic resin-like pitch which has a low softening temperature. The optimum temperature for fat and gas coal is 300°C. At this point a noticeable decomposition of the

Card 1/2

The Dissolution of Coal in Coal Oils With the Purpose of Obtaining Coal Oil Pitch

coal is observed. The highest yield is obtained at 350-390°C [Ref. 9]. At higher temperatures irreversible condensation processes are accelerated. The low-boiling fractions are distilled and the yield of pitch decreases. The time needed for dissolution is short. A coal piece of 60-65 mm is dissolved in 3 min to grains of 3-5 mm. The concentration of the coal has a considerable effect on the quality of the pitch; the softening temperature increases as well as the ash content and the residue which is insoluble in toluene. The yield of volatile matter decreases.
There are 6 tables and 13-references, 7 of which are Soviet, 3 English, 2 German and 1 Belgian.

ASSOCIATION: Vostochnyy nauchno-issledovatel'skiy uglekhimicheskiy institut (All-Union Scientific Research Coal-Chemical Institute).

SUBMITTED: August 3, 1957

NOVIKOV, V.N.; GUREVICH, B.S.

Technology of the production of coal-tar oil pitch. Koks i khim. no.2:45-49 '60. (MIRA 13:5)

1. Vostochnyy uglekhimicheskiy institut.
(Coal tar products)

PRIVALOV, V.Ye.; KOGAN, B.Ye.; NOVIKOV, V.N.

Distillation of heavy pyridine bases. Koks i khim. no.12:46-49 '62. (MIRA 16:1)

1. Vostochnyy uglekhimicheskiy institut.
(Pyridine bases)

S/080/62/035/001/001/013
D245/D304

AUTHORS: Shashmurin, P. I., Bolimer, Ye. P., and Novikov, V.N.

TITLE: Distribution of Ge during the coking of anthracite

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 1, 1962, 26-29

TEXT: The authors studied the distribution of Ge in the products of coking coal using the isotope ^{71}Ge as a tracer, added in the form of GeO_2. The specimens were heated in a horizontal furnace to 900°C, the heating rate being to 250° in the first 30 minutes and then at 3° per minute. Asbestos filters in the tube were used to absorb the vapors formed, removing the tarry constituents. The results showed that 70 - 80% of Ge in the original coal was retained in the coke formed and that the gases evolved contained only traces (not more than 0.2% of the Ge content of the coal). Ge passing into the vapor phase was almost completely retained in the asbestos filters where it became reduced by H_2 and CO to Ge metal. The Ge on the asbestos could be easily recovered by boiling with 10% HNO_3

Card 1/2

Distribution of Ge ...

solution. It was shown experimentally that the ^{71}Ge tracer added was distributed in the products in exactly the same way as the natural Ge present in the coal. There are 2 figures, 2 tables and 1 Soviet-bloc reference.

SUBMITTED: December 31, 1960

Card 2/2

ACCESSION NR: AP4040966 S/0147/64/000/002/0003/0012

AUTHOR: Novikov, V. N.

TITLE: Weight analysis of fuel tanks for aircraft with liquid-fuel reaction engines

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1964, 3-12

TOPIC TAGS: fuel tank, aircraft fuel tank, minimum weight tank, stress analysis, tank weight analysis, strength analysis, tank shell buckling

ABSTRACT: The minimum-weight design of tanks for the liquid-fuel components of aircraft reaction engines is discussed. Stress distribution in the shell of a cylindrical tank under combined loading consisting of internal pressure, bending moment, and axial forces is analyzed by using the membrane theory of shells. The complex action of this loading can cause either the buckling of the tank's shell or its rupture by meridional or hoop stresses. Design formulae for stability and strength of aircraft tanks are derived. Stress analysis of cylindrical rocket tanks of various arrangements for two-component

Card 1/2

ACCESSION NR: AP4040966

liquid propellants is presented. The stiffening of the shell and the weight analysis of plain and stiffened tank shells for aircraft of various purposes are discussed. Orig. art. has: 5 figures and 39 formulas.

ASSOCIATION: none

SUBMITTED: 23Dec63 ATD PRESS: 3061 ENCL: 00

SUB CODE: AC, AS NO REF SOV: 002 OTHER: 000

Card 2/2

BEDNOV, V.M.; SUKHORUKOVA, Ye.A.; NOVIKOV, V.N.

Semimicroanalytical method for determining phenanthrene. Koks i khim. no.2:39-43 '64. (MIRA 17:4)

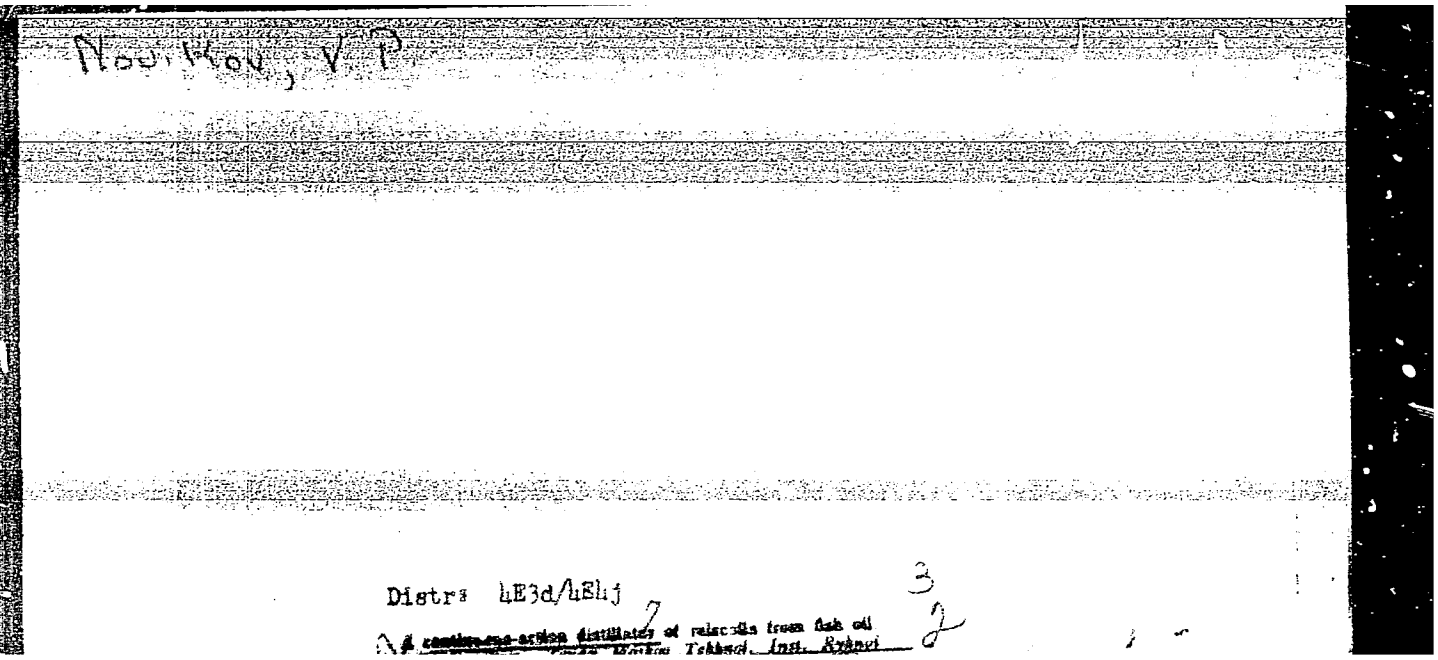
1. Vostochnyy uglekhimicheskiy institut.

SYCHIKOV, G.I.; KOVRIGIN, O.D.; LATYSHEV, G.D.; LONDARENKO, G.A.; NOVIKOV, V.N.

Spectrum of conversion electrons of the iridium fraction.
Izv. AN SSSR. Ser.fiz. 30 no.1:162-166 Ja '66.
(MIRA 19:1)

NOVIKOV, V.N.

Analysis of weight characteristics of fuel tanks of airplanes with liquid fuel jet engines. Izv.vys.ucheb.zav.; av.tekh. 7 no.2: 3-12 '64. (MIRA 17:9)



Distr: 4E3d/4E4j

3
2

NOVIKOV, V.P., starshiy geolog

Concerning G.S. Anan'ev's article "Some structural characteristics of the Kurchin- trough in centr-l Transbaikalia." Izv.vys.ucheb.zav.; geol.i razv.5 no.6:130 Je '62. (MIRA 15:7)

1. Kruchininskaya geologo-s"yemochnaya partiyav TSentral'nom Zabaykal'ye.
(Transbaikalia—Geology, Structural)
(Anan'ev, G.S.)

BUDTOLAYEV, N.M.; NOVIKOV, V.P.; SAUSHKIN, Yu.G.

Economic development of the eastern and western parts of the Soviet Union. Vest. Mosk. un. Ser. 5: Geog. 18 no.4:3-13 Jl-Ag '63. (MIRA 17:2)

SIZYKH, V.I.; NOVIKOV, V.P.; SAPOZHNIKOV, V.P.; FOMIN, I.N.

Pre-Cambrian of the Malkhan Range and the southwestern part of the Yablonovyy Range. Mat. po geol. i pol. iskop. Chit. obl. no.1:21-26 '63. (MIRA 17:6)

NOVIKOV, V. P., Candidate Vet Sci (diss) -- "The epizootiology of certain strongyloses of the digestive tract of sheep in Leningrad Oblast". Leningrad, 1959. 20 pp (Min Agric USSR, Leningrad Vet Inst), 200 copies (KL, No 25, 1959, 138)

BETEKHTIN, Georgiy Aleksandrovich; NOVIKOV, Vasiliy Platonovich

[Use of removable twine healds in the handlooming of rugs] Primenenie s"emnykh nitianykh galev remiza v ruchnom kovrotkachestve. Moskva, Gosmestpromizdat, 1962. 5 p. (MIRA 16:11)
(Rugs and carpets) (Looms)

NOVIKOV, V.P.

Equilibrium mixture of phases of the system glycerin-water. Masl.-zhir.prom.21 no.6:16-18 '55. (MLRA 8:12)

1. Mosrybvtus

(Glycerol) (Soap)

S/145/62/000/009/005/005
D262/D308

AUTHORS: Chunayev, M.V., Candidate of Technical Sciences, Docent, and Novikov, V.P., Engineer

TITLE: An automatic installation for pouring aluminum alloys in die-casting machines with a cold compression chamber and chill casting

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 9, 1962, 167-173

TEXT: This new automatic installation, designed, constructed and tested by the MVTU im. N.E. Bauman, is based on the design of the existing installation, and consists of a measuring pouring ladle, operated by a pneumatic-hydraulic driving mechanism which draws metal from the distributing crucible. A vertical hydraulic cylinder in the driving mechanism draws up the metal. The device is also provided with 2 pneumatically operated horizontal cylinders, placed one above the other. The upper cylinder is used for the removal of waste metal,

Card 1/2

S/145/62/000/009/005/005
D262/D308

whilst the lower moves the ladle and tilts it for pouring. Automatic control of the installation is executed by an electric system which also allows automatic interlocking, and is designed for semi-automatic and automatic operating conditions. There are 3 figures and 2 tables.

ASSOCIATION: MVTU im. N.E. Baumana (MVTU im. N.E. Bauman)

SUBMITTED: July 12, 1962

NOVIKOV, V.P.

USSR 6CO

Oats

Effect of lack of water in the soil on oats in various stages of development. Dokl. AN SSSR, 82, No. 4, 1952. Leningradskiy Gosudarstvennyy Pedagogicheskiy Institut im. A.I. Gertsena red. 1 Dec. 1951.

SO: Monthly List of Russian Accession, Library of Congress, June 1952, Uncl.

NOVIKOV, V.P.

Development of oat panicles under varying conditions of water supply. Bot.zhur. 39 no.1:17-20 Ja-F '54. (MLRA 7:3)

1. Leningradskiy Gosudarstvennyy pedagogicheskiy institut im. A.I.Gertsena. (Oats)

NOVIKOV, V.P.

Manifestations of premature deterioration of the spine following an acute trauma. Trudy LIETIN no.16:343-355 '64.

Manifestations of degenerative-dystrophic processes developing after an acute trauma in macerated preparations of vertebrae. Ibid.:356-366 (MIRA 19:1)

1. Pervyy Leningradskiy meditsinskiy institut imeni akademika I.P. Pavlova.

L 15899-66 EWT(m)/ETC(f)/EWP(b)/T/EWP(e)/EWP(t)/EWG(m)/ IJP(c) AT/WH/JD/JG

ACC NR: AT6002251 SOURCE CODE: UR/2564/65/006/000/0203/0205

AUTHOR: Novikov, V. P.; Ionov, V. I.

ORG: None

TITLE: Preparation of alpha-silicon carbide single crystals [Paper presented at the Third Conference on Crystal Growing held in Moscow from 18 to 25 November, 1963]

SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 6, 1965, 203-205

TOPIC TAGS: silicon carbide, crystal growing, crystal structure

ABSTRACT: The article deals with the study of certain factors affecting the growth and properties of α-SiC single crystals grown from the vapor phase by the method of J. A. Lely (Ber. deutsch. keram. Ges. 32, 229, 1955). The method was substantially improved by using a thin-walled sleeve forming a cavity and having apertures for discharging the crystals; the advantage of the sleeve is that it restricts the disordered growth of crystals and makes it possible to use powdered SiC synthesized from pure materials and to equalize the thermal field inside the cavity. To increase the probability of nucleation, various methods of producing supersaturation at the start of the growth process were

Card 1/2

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ACC NR: AT6002251

employed, the best of which was found to be a brief cooling of the cavity of the crucible: the formation of crystals was thus stabilized over a wide temperature range (2350 — 2600C). The main factors influencing the crystal growth are the radial and axial temperature gradients, which were calculated. Most of the crystals had a hexagonal six-layer structural form C_6 mc (6/2); 15-layer rhombohedral R_3 m (15/3), 10-layer trigonal C_3 m (10/1), and 8-layer hexagonal C_6 mc (8/2) forms were found less frequently. Correlations were established between the properties of the SiC single crystals and the design of the furnaces employed. Crystals of n-type with a resistivity of about 1000 ohm cm and of p-type with a resistivity of about 25000 ohm cm were obtained. Orig. art. has: 2 figures.

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NOVIKOV, V.S.

Light industries of the Russian Federation in 1957. Leg.pron. 17 no.4:4-8 Ap '57. (MLRA 10:4)

1. Ministr legkoy promyshlennosti RSFSR.
(Russia--Manufactures)

GORENSHTEYN, B.V., kand.tekhn.nauk; CHINENKOV, Yu.V., kand.tekhn.nauk; ABOVSKIY, V.P., inzh.; GUTOVSKIY, E.V., inzh.; NOVIKOV, V.S., inzh.; PESHKIN, I.G., inzh.

Use of long cylindrical precast prestressed concrete shells. Prom. stroi. 40 [i.e. 41] no.4:13-17 Ap '63. (MIRA 16:3)
(Roofs, Shell)