"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6



standards and such parameters as have been corrected after deviation and have returned to the normal state. In the case of the latter also the time of their return is recorded.
On the registration card either all controlled points or only part of them can be fixed within certain periods of time. An example is given for both types of cards.
The entire apparatus is constructed in form of a 3-fold stand measuring 2.000 x 2.000 x 600 mm. The individual electronic devices are built in form of blocks and are connected with the main lines by means of multiple plugs. In order to be better able to estimate the size of the machine the number of its components is given: 780 relays, 35 counters, 26 tubes, 600 germanium diodes, 2.000 resistances, 200 condensers.
The economic advantage of using such a machine may be judged from the following concrete example: A Moscow rubber factory which spends 2 million rubles for changing over to automatic control by using the machine MARS is able to increase its annual profit by at least more than 5 million rubles. There are 5 figures, 2 tables, and 7 Soviet references.



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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

8(3) SOV/119-58-11-6/15

AUTHORS: Mif, N. P., Engineer, Yakobson, B. M., Engineer

TITLE: Mercury Jet Commutators in Systems for the Control of Many Points (Rtutno-struynyye kommutatory v sistemakh mnogotochechnogo kontrolya)

PERIODICAL: Priborostroyeniye, 1958, Nr 11, pp 15-18 (USSR)

ABSTRACT: In a mercury jet commutator a tube rotates in a fixed container filled with mercury; the end of the tube is tapered like a jet. The jet is filled with mercury by means of a centrifugal force. When leaving the jet, the mercury reaches contacts and thus closes a circuit. A sectional drawing of a 2-bank commutator is given. This 100-point commutator has the following technical data:

| | |
|---|---|
| diameter of case | 250 mm |
| height including electromotor | 150 mm |
| number of contacts in one bank | 100 |
| number of banks | 2 |
| time needed for one revolution | ~ 0,3 sec. |
| switching-over time | 0,0035 sec. |


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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SOV/119-58-11-6/15

Mercury Jet Commutators in Systems for the Control of Many Points

| | |
|---|---|
| time for contact | ~ 0,0015 sec. |
| transition-resistance | < 0,05 Ω |
| maximum contact current in the case of inductionless load | 0,5 A |
| maximum voltage between contacts | 100 V |
| insulation resistance between contacts after long operation | > 1 MΩ |
| power output of the motor | 10 VA |
| weight of the commutator including motor | 5 kg |

Two examples showing the working of the mercury-jet commutator are given both in the block-scheme and in the principal wiring circuit:

a) A signal system indicating deviations from the adjusted parameters, where a Braun-tube is used as a signal panel.
b) A signal system indicating deviations from the adjusted parameters, in which Neon lamps are used as a signal panel.

There are 7 figures.

Card 2/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

S/123/60/000/015/006/007
A004/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 15, p. 254, # 80543

AUTHOR: Yakobson, B. M.

TITLE: Electronic Machines for the Automation of Production Processes

PERIODICAL: Opyt raboty prom-sti Sovnarkhoza (Mosk. gor. ekon. adm. r-n), 1959, No. 1, pp. 70-74

TEXT: The author gives a brief description of the layout and operation principle of the MAPC (MARS)-200 and MAPC (MARS)-300 electronic machines (manufactured by SKTB BFA) designated for the automatic checking and control of the technological processes of manufacturing rubber and plastic articles. With some further improvements, electronic machines of this type can be used for the automation of artificial fiber production processes. The chief distinction of these machines is the transition from continuous measurement of every parameter separately to the so-called multiple check method with the aid of a switch device. The machines deliver information in the form of digits and signals on the minic bus. The digital information is automatically printed on charts of

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

S/123/60/000/015/006/007
A004/A001

Electronic Machines for the Automation of Production Processes

deviation and periodic registration. The parameters to be checked are: temperature, consumption, vacuum, average temperatures. Apart from temperature condition checks, the MARS-200 machine effects positional temperature control as well as automatic blocking of the installation if the technological process is disturbed. SKTB BFA is also developing machines with complex functions of centralized control. There are 3 figures.

G. V. I.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

28(1), 28(2)

AUTHOR: Yakobson, B. M., Engineer SOV/119-60-1-2/14

TITLE: The Construction Principle of the Machine of the Type MARS for Centralized Control

PERIODICAL: Priborostroyeniye, 1960, Nr 1, pp 3 - 9 (USSR)

ABSTRACT: This machine for the automatic recording and signaling of industrial processes was developed by the Spetsial'nyy konstruktorskiy byuro biofizicheskoy apparatury i elektronnykh mashin (Special Construction Bureau for Biophysical Apparatus and Electronic Machines). The measured values are transmitted to a computer board or a memory circuit. In the recording system the values are recorded on cards. Three models were developed, the structure of which is uniform (Ref 1). Experiments showed that the use of special transformers, which transform the nonlinear signals of the transmitters into linear standard signals, is not necessary. The production of such special transformers would further cause considerable difficulties. The switching systems establishing connection between the transmitters with a low signaling level and the remaining systems of the machine consist of a hermetically closed relay.

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

The Construction Principle of the Machine of the Type MARS for Centralized Control SOV/119-60-1-2/14

The surfaces of the contact lenses of these relays are made from special material. Where 100 and more measuring points per second have to be evaluated, Hg-commutators are used. The relay-commutator shown in figure 1 is discussed, with the aid of the structural diagram of the circuit shown in figure 2. The measurements are carried out by the machine according to the servomechanic method. The disadvantages of this method are pointed out. The author then in detail discusses the measuring-circuit shown in figure 4, which is intended for temperature- and consumption measurements. Compensation of the measurement signals of the transmitters is effected by means of rheocords or induction coils. The digital converter used in the machine of the MARS-type, the disk of which is shown in figure 5, is also discussed in detail. At present, electromechanic digital converters are being used, but optical digital converters are in the act of being developed. The structure of the decoding device for the dyadic-decimal code, which is used by this machine, is discussed on the

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6



basis of figure 6. An electric Rheinmetall-typewriter is connected to the decoding device. Further, the storage units are dealt with, and the control system proper is described. The author in this connection speaks about experiments, in which ferrites and tubes of the type MTKh were tested. The programing block and the control block are built on to the relay of the type RKN. Finally, the block diagram of the comparator, which is shown in figure 7, is discussed, and several data concerning the machine of this type shown in figure 7, and which controls 200 temperature measuring-points, are given. The rapidity of measurement with an error of 1% amounts to about 0.3 seconds per measuring point. Control is effected by signaling and recording on cards, and it permits also digital recording. Machines of this type are being further developed. There are 9 figures and 1 Soviet reference.



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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

83404

S/119/60/000/009/003/008
B012/B058

9,7100

AUTHOR: Yakobson, B. M.

TITLE: Application of the Information Theory for Estimating the Efficiency of Centralized Control Systems

PERIODICAL: Priborostroyeniye, 1960, No. 9, pp. 8-12

TEXT: Most automatic regulating systems need control systems with an operator. The operator receives information on the state of the process with the aid of control means, and cuts into the course of the process as needed. The conception of the amount of information related to control is analyzed first. The difficulties arising in this connection are shown. These can be eliminated by a centralized control system. Such a system switches on a special electronic machine which connects process and operator into a single system of the passage and evaluation of information. One of the most important problems of a centralized control system is to transform information in such a manner that the operator can receive it without great losses. This is mainly achieved by reducing the

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

83404

Application of the Information Theory for Estimating the Efficiency of Centralized Control Systems

S/119/60/000/009/003/008
B012/B058

number of data fed to the operator. It is shown that the criteria for evaluating the centralized control system may be selected on the basis of determining the largest amount of information (which is fed to the operator) for the smallest amount of data. (Data with few informations must be eliminated, and only those with a great number of informations are to be transformed into a more convenient form). The basic transformation of information is done in the systems that detect and record deviations. An ideal scheme for the detection of deviations investigated with the aid of Fig. 1 illustrates these systems. It is shown that the possibility of developing such a system in practice is largely restricted, and that it is necessary to use a method of multiple control by applying a scanning device. This complicated work can, however, be reduced by selecting the optimum quick action of the scanning device. The entire system of centralized control, including the electronic machine and the operator, can be characterized by the coefficient K of the efficiency of the system: $K = 1/\eta_1\eta_2\eta_3$, where $\eta_1$ is the number of steps of the scanning device per information unit, $\eta_2$ the number of binary

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APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

83404

Application of the Information Theory for Estimating the Efficiency of Centralized Control Systems

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B012/B058

operations in the blocks of the diagram per step of the scanning device, and $\eta_3$ the number of data (deviations) per unit of transmitted information. It is shown by an example how formulas and curves for the approximative selection of the optimum quick action and for the determination of the coefficients $\eta_1$ and $\eta_2$ can be obtained for certain processes. It is assumed that the system that detects deviations is a "passive" one, that is, it serves only for the determination of the predominant number of deviations and estimates their duration, without influencing the character and statistics of the process. However, if the system regulates the process on the basis of deviations, a different problem is to be solved. If the mean number of deviations is, however, low, the controlling action of the system does not influence the statistics of the process, and the formulas and curves given here can be used. There are 5 figures and 5 Soviet references.

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, B.M.; DMITRIYEV, G.K.

Problems of measurement in centralized control and management systems. Izm.tekh. no. 4:21-25 Ap '64. (MIRA 17:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, B.M., kand.tekhn.nauk

Organizing combined centralized system of industrial management.
Priborostroenie no.9:1-4 S '65. (MIRA 18:10)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 07865-67 EWT(d)/EWT(1)/EEC(k)-2/EWP(1) IJP(c) BB/GG/JXT(RC)
ACC NR: AP6011260 SOURCE CODE: UR/0413/66/000/006/0099/0099

AUTHOR: Yakobson, B. M.

ORG: none

TITLE: Device for converting pneumatic (hydraulic) signals into digital code. Class 42, No. 179993 [announced by Special Construction Bureau for Biophysical Apparatus and Electronic Machines (Spetsial'noye konstruktorskoye byuro biofizicheskoy apparatury i elektronnykh mashin)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 99

TOPIC TAGS: pneumatic device, analog digital encoder

ABSTRACT: This Author Certificate presents a device for converting pneumatic (hydraulic) signals into digital code. It contains a pulse generator, pulse counter, compensating signal generator, gates, electric null indicator, pneumoelectric transducer, and control unit (see Fig. 1). To increase the response rate, the device contains membrane null units, the number of which equals the number of converted signals. The comparison chambers of the units are joined and their output is connected to the input of the pneumoelectric transducer.

Card 1/2 UDC: 681.142-525

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 07865-67

ACC NR: AP6011260

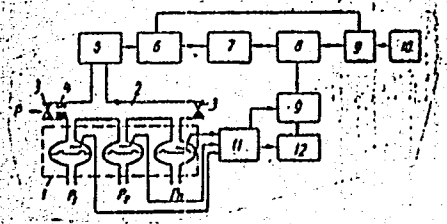

Fig. 1. 1 - null units; 2 - tube; 3 - valves; 4 - throttle; 5 - pneumoelectric transducer; 6 - electric null indicator; 7 - compensating signal generator; 8 - pulse counter; 9 - gates; 10 - pulse generator; 11 - control unit; 12 - storage device

Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 31Oct63

Card 2/2 bc

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

ACC NR: AP7002563 (A,N) SOURCE CODE: UR/0413/66/000/023/0048/0049

INVENTOR: Yakobson, B. M.

ORG: none

TITLE: Device for delivery of controlling commands. Class 21, No. 189068 /announced by Special Design Bureau of Biophysical Apparatus and Electronic Machines (Spetsial'noye konstruktorskoye byuro biofizicheskoy apparatury i elektronnykh mashin)/

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 48-49

TOPIC TAGS: pneumatic device, pneumatic servomechanism, automatic control equipment

ABSTRACT: This Author Certificate presents a device for delivery of controlling commands to pneumatic servomechanisms and regulator controllers. The device contains a pulse generator, a pulse counter, a digital-analog converter, a null unit, valves, and a pneumatic-electric converter. To increase the response rate and accuracy, the device contains pneumatic followers used as memory units whose number equals the number of servomechanisms. The inputs are joined through valves and are coupled with the input of the pneumatic-electric converter.

SUB CODE: 13/ SUBM DATE: 25May65

Card 1/1 UDC: 621.3.078-525

0930 2701

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SOKOLOV, A.D.; MIKHAYLOVA, T.N.; TIMOFEYEV, A.V.; YAKOBSON, B.V.

Factors affecting the hardening of novolac molding powders. Plast.-massy no.10:22-24 '61. (MIRA 15:1)

(Plastics--Molding)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

BEL'KEVICH, P.I.; GAYDUK, K.A.; YAKOBSON, B.V.; SOKOLOV, A.D.; TIMOFEYEV, A.V.

Use of peat wax as lubricant for molding powders. Plast.massy no.6:64-65 '65. (MIRA 18:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 36271-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP5008194 S/0286/65/000/005/0069/0070

23
B

AUTHORS: Faydel', I. Ya.; Sokolov, A. D.; Timofeyev, A. V.; Yakobson, B. V.; Ust'kachkintsev, A. N.; Veselov, N. N.

TITLE: A method for obtaining phenolic aldehyde pressing powders. Class 39, No. 168873

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 69-70

TOPIC TAGS: phenolic aldehyde, pressing powder, filler, coal, ash

ABSTRACT: This Author Certificate presents a method for obtaining phenolic aldehyde pressing powders with the application of mineral filler. To broaden the assortment of fillers and lower the cost of the powders, ash resulting from burning of brown coal is used as the filler.

ASSOCIATION: none

SUBMITTED: 25Jul62 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SOL'KEVICH, P.L. [Bial'kevich, P.L.]; YAKOBSON, B.V. [Iakobson, B.V.]; GAYDUK, K.A. [Haiduk, K.A.]; SOKOLOV, A.D. [Sakalov, A.D.]

Peat as an active filler for molding powder plastics. Vestsi AN BSSR.Ser.khim.nav. no.2:96-98 '65.

(MIRA 13:12)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

NEMSHILOVA, N.A. [deceased]; KULIKOVA, Ye.N.; VAYMAN, Ye.I.; YAKOBSON, D.A.; KUZ'MINA, Yu.T.; FEDOROVA, S.A.; OSANOVA, V.P.; BLINOVA, L.L.; RYABOVA, N.I.

Distribution of enteropathogenic Escherichia coli among various population groups in Kazan and some cities of the Tatar A. S. S. R. Zhur. mikrobiol., epid. i immun. 41 no.9:145-146 S '64. (MIRA 18:4)

1. Kazanskiy institut epidemiologii, mikrobiologii i gigiyeny i Tatarskaya respublikanskaya sanitarno-epidemiologicheskaya stantsiya, poliklinika No.2.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

KULIKOVA, Ye.N.; YAKOBSON, D.A.; DONSKAYA, R.B.; OSIPOVA, P.K.; GERTMAN, Z.A.; TSYBUL'SKAYA, M.G.

Role of B. proteus in acute diseases of newborn infants. Vop. okh. mat. i det. 6 no.3:35-38 Mr '61. (MIRA 14:10)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny, 7-y detskoy bol'nitsy 4-go rodil'nogo doma.
(PROTEUS) (INTESTINES--DISEASES)
(INFANTS (NEWBORN))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, D.A.

Evaluation of the methods for studying the virulence of enteropathogenic Escherichia coli. Zhur.mikrobiol., epid. i immun. 42 no.3:137 Mr '65. (MIRA 18:6)

1. Kazanskiy institut epidemiologii, mikrobiologii i gigiyeny.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

CHECHEL'NITSKAYA, S.E.; BAYGULEVA, S.A.; YAKOBSON, D.Ya.; VAYMAN, T.I.

Material on the spread of Lamblia and other flagellate parasites of the intestine among younger children. Med.paraz. i paraz.bol. 28 no.2:231-232 Mr-Ap '59. (MIRA 12:6)

1. Iz Kazanskoy gorodskoy sanitarno-epidemiologicheskoy stantsii i Kazanskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny.
(WORMS, INTESTINAL AND PARASITIC)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, El'mar

ORLOVSKIY, A.V., professor; LYUTER, R.A., doktor tekhnicheskikh nauk; KAZOVSKIY, Ye.Ya., kandidat tekhnicheskikh nauk; YAKOBSON, El'mar, inzhener; ANTOPOL'-SKIY, V.M., inzhener; PUKHOV, G.Ye., doktor tekhnicheskikh nauk; FYURSTEN-BERIN, A.I., inzhener; BERGER, A.Ya., professor (Leningrad); TSVERAVA, G.K., inzhener; KRAYNIY, K.I., inzhener (g.Kotovsk, Tambovskoy obl.); BELOV, V.N., inzhener (g.Ul'yanovsk).

Correspondence conference of readers of "Elektrichestvo." Elektrichestvo no.8:89-91 Ag '53. (MLRA 6:8)

1. Kiyevskiy politekhnicheskiy institut (for Orlovskiy). 2. Zavod "Elektro-sila" (for Lyuter and Kazovskiy). 3. Estonkommunenergo (for Yakobson). 4. Saratovskiy industrial'nyy tekhnikum (for Antopol'skiy). 5. Tomskiy politekhnicheskiy institut imeni Kirova (for Pukhov). 6. Tikhvinskiy glino-zemnyy zavod (for TSverava). (Electric engineering--Periodicals)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, E.S.

Melting and spinning machine for producing capron fibers. Biul. tekh.-ekon.inform. no.11:53-55 '59. (MIRA 13:4)
(Nylon)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, E.V.

AID P - 1387

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 14/30

Authors : Shadurskiy, O. S., Eng., and Yakobson, E. V.,Eng.

Title : Large block mounting of the metallic structures of a cooling tower

Periodical : Elek. Sta., 2, 43-44, F 1955

Abstract : The authors describe and illustrate the method applied. 2 drawings, 3 photographs

Institution: None

Submitted : No date

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

CHERNAVSKIY, V.P., starshiy nauchnyy sotrudnik; YAKOBSON, G.A.

Strengthening the slopes of an earth roadbed with soil which is not easily blown away. Transp.stroi. 12 no.7:8-9 Jl '62. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut transportnogo stroitel'stva Ministerstva transportnogo stroitel'stva.
(Railroads—Earthwork)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

IVANOV, V.P.; YAKOBSON, G.A.; FOMENKO, B.S.

Mutual influence between corn and broad beans through their aerial organs. Fiziol. rast. 10 no.4:447-457 Jl-Ag '63. (MIRA 16:8)

1. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 13635-65 EPA(s)-2/EWT(m)/EPF(c)/EWG(v)/EPR/EPA(w)-2/EWP(j)/T Pc-4/Pe-5/
Pr-4/Ps-4/Pt-10/Pab-10/Pa-4 RPL/ASD(m)-3 RM/WW

ACCESSION NR: AP4046897 S/0191/64/000/010/0019/0021

AUTHOR: Zhivukhin, S. M.; Tolstoguzov, V. B.; Kireyev, V. V.; Alova, N. V.; Gerasimenko, L. T.; Yakobson, F. I.

TITLE: Thermal stability of poly /dihydroxyarylenephosphonitriles/

SOURCE: Plasticheskiye massy, no. 10, 1964, 19-21

TOPIC TAGS: thermal stability, polymer stability, thermal degradation, nitrile polymer, phosphonitrile polymer, resorcinol, hydroquinone, hexabutoxytriphosphonitrile, oxidative degradation, polycondensation, transesterification

ABSTRACT: The authors investigated the preparation, physical properties, structure and practical applications of poly /dihydroxyarylenephosphonitrile/ polymers either by transesterification of hexabutoxytriphosphonitrile with resorcinol or hydroquinone, or by polycondensation of trimeric phosphonitrile chloride with resorcinol under various conditions. The oxidative degradation of these polymers was investigated by determining the weight loss in previously hardened samples (300C for 5 minutes) during heating at 300, 400 and 500C. In general, they showed relatively high thermal stability up to 300C and above, with significant destruction appearing only at 500C. The stability depended, however, on the chemical composition, being increased by a higher ratio of aromatic hydroxy to butoxy or chloride

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 13635-65

ACCESSION NR: AP4046897

residues; polymers prepared with resorcinol also showed somewhat higher stability than those containing hydroquinone. The infrared spectra of the degradation products were characterized by increased absorption in the 940-990 $cm^{-1}$ band. Polymers containing resorcinol and hydroquinone both showed exothermic peaks at 550C due to destruction of the P-O-C(aryl) bond, while those based on diphenylolpropane showed two exothermic peaks (490 and 580C), due probably to the incipient decomposition of the aliphatic radical. The poly /dihydroxyarylenephosphonitriles/ are recommended for use as construction materials, and for short-term use at 450-500C as lacquers or insulating coatings. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

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

NO REF SOV: 002 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

IVANOV, V.P.; YAKOBSON, G.A.; FOMENKO, B.S.

Effect of soil moisture on the exchange of root exudations.
Fiziol. rast. 11 no.4:630-637 Jl-Ag '64.
(MIRA 17:11)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

IVANOV, V. P.; YAKOBSON, G. A.

"On the mutual effects in plant communities through root excretions."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS USSR, Moscow.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

IVANOV, V.P.; YAKOBSON, G.A.

Metabolite exchange in plants through aerial organs. Fiziol. rast. 12 no.3:405-411 My-Je '65. (MIRA 18:10)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN SSSR, Moskva.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

Reactions in which hydrohalides are split off

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, S. S.

[illegible]

with 1.1 moles anhyd. KF at 200° [illegible] 90% yield. The $NH_2$, HO, and HS derivs. of 2-[illegible]$C_6H$, can be readily prepd. from I in presence of anhyd. KF at 100-20° several min. up to a few hrs. V. S. Mihajlov

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.

KOZLOV, V.V.; YAKOBSON, G.G.

Research on naphthalene series. Part 16: Conversion of 2-naphtolo-6-sulfonic acid salt into 2-naphthol-7-sulfonic acid salts. Zhur. ob.khim. 27 no.5:1156-1160 My '57. (MIRA 10:8)
(Naphtolsulfonic acid)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G. G.

Reaction of 2,4-dinitrochlorobenzene and 2,4-dinitro-bromobenzene with bromides. N. N. Mikoshiba, G. G. Yakobson, and G. G. Yakobson. (D. I. Mendeleev Chem. Technol. Inst., Moscow). Zhur. Obshchei Khim. 27, 1073-6(1957). KF (calling 20.4 g. 2,4-$(O_2N)_2C_6H_3Cl$ (I) and 10.6 g. dry KF) dried finally 2 hrs. at 200°) 7 hrs. at 190-200° gave 2.6% 2,4-$(O_2N)_2C_6H_3F$ and 69% 2,4-$(O_2N)_2C_6H_3F \cdot 2,4\text{-}(O_2N)_2C_6H_3OH$, m. 104-5°, and 69% 2,4-$(O_2N)_2C_6H_3F$ (II), b. 127-9°, m. 27° (MeOH). A similar reaction with $NH_4F$ in 5 hrs. at 170-90° gave 60-74% 2,4-$(O_2N)_2C_6H_3NH_2$ (III), m. 178-80°; *Ac* deriv., m. 151°. Heating 0.01 mole I with 2.5 g. ROH and 0.02 mole KF at up to 120° 5-10 hrs. gave *ethers* of I: 51% *Me*, m. 51°; 62% *Et*, m. 85°; 25% $C_6H_5$, m. 65.5°; 66% $PhCH_2$, m. 150°; 39% $PhCH_2CH_2$, m. 88.5°; 28% $PhCH_2CH_2CH_2$, m. 86.5°; 0.9% $Ph$, m. 72°. Heating I with $KHF_2$ 6 hrs. at 200° gave but II. Heating 17% conversion of I and some II was isolated. Heating 2.03 g. I, 1.16 g. KF, and 3 ml. $PhCH_2OH$ in 5 ml. MePh at reflux 6 hr. gave 87% unreacted I and 6% $PhCH_2$ ether of I. Refluxing I with 4 parts $NH_4F$ and 5 ml. EtOH gave some III; in $PhCH_2OH$ the yield was 23%. Heating 2,4-$(O_2N)_2$ $C_6H_5Br$ with KF 7 hrs. at 200° gave 63% II; in presence of EtOH there formed 51% Et ether of I; $PhCH_2$ ether of I (68%) and Ph ether (74%) formed similarly. G. M. K.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G., Cand Chem Sci (diss) "On the interaction between aromatic haloid-nitrocompounds and the fluorides of metals." Mos, 1958. 11 pp (Min of Higher Education USSR. Mos Order of Lenin Chemico-Technological Inst im D.I.Mendeleyev), 150 copies (KL,48-58, 102)

-18-

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

AUTHORS: Vorozhtsov, N. N. jun., Yakobson, G. G. SOV/156-58-1-29/46

TITLE: Production of Aromatic Fluorine Derivatives From Chlorine Derivatives (Polucheniye aromaticheskikh ftorproizvodnykh iz khlorproizvodnykh)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 122 - 124 (USSR)

ABSTRACT: The authors found already previously (Ref 1) that 2,4-dinitro-fluorobenzene is formed with a more than 90% yield by a heating of 2,4-dinitro-chlorobenzene with anhydrous potassium fluoride. In view of the increasing interest for aromatic fluoro-nitro-compounds as possible insecticides and antiseptica (Ref 2) it would be of importance to extend the aforementioned method also to other compounds. The authors found that by the action of potassium fluoride at from 170 to 190° the chlorine atoms may be replaced by a fluorine atom if the former are activated by substituents of second order which are formed in both o- and p-position and if one of the latter is a nitro-group. If 2 active chlorine atoms are contained in the molecule, the two halides enter the reaction. The following compounds were obtained

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Production of Aromatic Fluorine Derivatives From Chlorine Derivatives SOV/156-58-1-29/46

in this way: I) 1,3-difluoro-4,6-dinitrobenzene with a satisfactory yield of both 1,3-dichloro- and 1,3-fluoro-chloro-4,6-dinitrobenzene. In connection with II) 4-fluoro-3-nitro-phenyl-methyl-sulfone, the hitherto undescribed 4,4'-bis-methylsulfone-2,2-dinitro-diphenyl-ether (III) is formed. Since the previous work written by the authors (Ref 1) had gone to the press, the report delivered by Finger and Kruse (Kruze)(Ref 3) who also worked out methods of producing fluoro-nitro-compounds by heating corresponding chlorine-derivatives was published. The results obtained by these American authors are summarized. The methods of production, yields, and some constants of the compounds dealt with are given in an experimental part. There are 7 references, 1 of which is Soviet.

ASSOCIATION: Kafedra tekhnologii promezhutochnykh produktov i krasiteley Moskovskogo khimiko-tekhnologicheskogo instituta im.D.I.Mendeleyeva(Professorial Chair of the Technology of Intermediate Products and Dyes of the Moscow Chemical-Technological Institute imeni D.I.Mendeleyev)

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

AUTHORS: Vorozhtsov, N. N., jun., Yakobson, G. G. SOV/156-58-2-36/48

TITLE: Identification of the Oxycompounds as 4,6-Dinitro Resorcin Ether (Note III From the Series "Aromatic Fluorine Derivatives" (Refs 1,2)) (Identifikatsiya oksisoyedineniy v vide efirov 4,6-dinitrorezortsina(Soobshcheniye III iz serii "Aromaticheskiye ftorproizvodnyye"))

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 2, pp. 340 - 348 (USSR)

ABSTRACT: In recent time methods of the identification mentioned in the title were worked out (Refs 3,4). The applicability of this method is limited by the fact that many ethers of 2,4-dinitro phenol are liquid or crystallizable only with difficulty. The ethers described in publications and mentioned in the title have considerably higher melting points than the last mentioned. If the oxy compounds are heated with a theoretical quantity of 1,3-difluorine-4,6--dinitro benzene in the presence of potassium fluoride (Ref 4), the ethers mentioned in the title are formed with an almost quantitative yield. They are crystalline substances

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

Identification of the Oxycompounds as 4,6-Dinitro Resorcin Ether (Note III From the Series "Aromatic Fluorine Derivatives (Refs 1,2)) SOV/156-58-2-36/48

with a distinct melting temperature. The authors produced ethers of all normal primary alcohols with a number of carbon atoms of 1 - 9, furthermore several higher alcohols and phenols. The dependence of the melting temperatures of the ethers of normal primary alcohols on the number of carbon atoms in the alcohol is strange. At first the melting temperatures decrease with rising number of carbon atoms and reach a minimum (46° -hexyl alcohol ether). In the case of a further increase of the number of carbon atoms the melting temperature rises up to 95° (dioctyl ether) and is then reduced rapidly in the case of dinonyl ether (33°, Fig 1). Mixed samples of ethers with approximate melting temperatures cause a rapid depression. This makes possible their application for the identification of the alcohols. All investigated primary and secondary alcohols and phenols react easily with 1,3-difluorine-4,6-dinitro benzene. A reduced yield of the ether from phenyl-methyl carbinol is explained apparently by a slight dehydration of the latter. Tertiary alcohols: trimethyl-carbinol and dimethyl-phenyl

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

Identification of the Oxycompounds as 4,6-Dinitro Resorcin Ether (Note III From the Series "Aromatic Fluorine Derivatives" (Refs 1,2)) SOV/156-58-2-36/48

carbinol do not react with 1,3-difluorine-4,6-dinitro benzene under the described conditions. The last mentioned substance reacts with alcohols in the presence of potassium fluoride similarly to the fluorine derivative, however, considerably more slowly. Therefore it is not expedient to use it for the identification. There are 1 figure, 1 table, and 5 references, 3 of which are Soviet.

ASSOCIATION: Kafedra tekhnologii organicheskikh krasiteley i promezhutochnykh produktov Moskovskogo khimiko-tekhnologicheskogo instituta im.D.I.Mendeleyeva (Chair of Technology of Organic Dyes and Intermediate Products of the Moscow Institute of Chemical Technology imeni D.I.Mendeleyev)

SUBMITTED: October 17, 1957

Card 3/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, N.N., ml.; YAKOBSON, G.G.

Identification of oxygen containing compounds in the form of 4,6-dinitroresorcinol ethers. Nauch. dokl. vys. shkoly; khim. i khim. tekh. no.2:346-348 '58. (MIRA 11:6)

1. Predstavlena kafedroy tekhnologii organicheskikh krasiteley i promezhutochnykh produktov Moskovskogo khimiko-tekhnologicheskogo instituta im. D.I. Mendeleyeva.
(Ethers)
(Alcohols)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G. G.

79-1-9/63

AUTHORS: Vorozhtsov, N. N. jun., Yakobson, G. G.

TITLE: On the Synthesis of 2,4-Dinitrophenyl Derivatives of Oxy- and Mercapto Compounds and Amines (K polucheniyu 2,4- dinitrofenil'nykh proizvodnykh oksi - i merkaptosoyedineniy i aminov)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 1, pp.40-44 (USSR)

ABSTRACT: The authors earlier determined that 2,4-dinitrochlorobenzene enters into reaction with oxy compounds in the presence of anhydrous potassium fluoride under the formation of ethers of 2,4-dinitrophenol. It became evident that the fluorine derivative of this benzene reacts more smoothly with oxycompounds in the presence of potassium fluoride than with the use of other bases, the reaction from beginning to end taking place in a neutral medium. With the use of alcohols and phenols almost quantitatively pure 2,4-dinitrophenyl derivatives are obtained from the reaction mass (see formulae). The 2,4-dinitrophenyl derivatives of secondary oxycompounds are obtained with better yields in the presence of anhydrous potassium fluoride than in the presence of the triethylamine usually used.

Card 1/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

79-1-9/63

On the Synthesis of 2,4-Dinitrophenyl Derivatives of Oxy- and Mercapto Compounds and Amines

(In one case like 79 to 28 %!). The 2,4-dinitrophenyl derivative of phenylmethylcarbinol is obtained with a 28 % yield in the presence of potassium fluoride, whereas with triethylamine only 11 % can be attained. In this case the 2,2',4,4'-tetranitrodiphenyl ether (43%) is the main product of the reaction. The mercapto compounds with 2,4-dinitrochlorobenzene on heating in the presence of potassium fluoride quantitatively yield 2,4-dinitrophenyl derivatives in a pure state (see formulae). In the absence of potassium fluoride the mercapto compounds do not react with 2,4-dinitrochlorobenzene and 2,4-dinitrofluorobenzene. The 2,4-dinitrophenyl derivatives of the amines, products of their conversion with 2,4-dinitrochloro- and 2,4-dinitrofluoro-benzene, can under the same conditions be isolated from the reaction mass purely and quantitatively direct. There are 2 tables, and 13 references, 2 of which are Slavic.

ASSOCIATION: Moscow Chemical-Technological Institute imeni D.I. Mendeleyev (Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva)

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

5 (2, 3)

AUTHORS: Vorozhtsov jr, N. N., Corresponding Member AS USSR, Yakobson, G. G., Rubina, T. D.

SOV/20-127-6-22/51

TITLE: On the Mechanism of Fluorochlorobenzene Amination by Metal Amides and Aqueous Ammonia

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 6, pp 1225-1227 (USSR)

ABSTRACT: As is known, neither fluorobenzene (Ref 1) nor fluorotoluene (Ref 2) react with the alkaline metal amides in liquid ammonia. The amination of compounds containing various halogens has hardly been investigated (Refs 3, 4). The authors studied the amination mentioned in the title in liquid and aqueous ammonia in the presence of copper chloride. In all cases investigated here, the chlorine atoms were replaced by the amino group. Neither the yield nor the composition of the amination products are practically influenced by the replacement of the sodium amide by lithium- or potassium amides. Table 1 shows the experimental results. A. N. Shikanov, student, took part in the experiments. The spectrum analysis was made by V. A. Plakhov. According to the authors' results, fluorobenzene is practically not aminated by aqueous ammonia at 250° within 6 h. The amination by metal amides

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

On the Mechanism of Fluorochlorobenzene Amination by Metal Amides and Aqueous Ammonia SOV/20-127-6-22/51

probably proceeds via an intermediate formation of substituted dehydrobenzenes (Ref 3). The same product (I) is apparently formed from the o- and m-fluorochlorobenzene, while the product (II) is formed from the para-isomer. The isomeric composition of the amination products confirms the assumption concerning the influence of the inductive effect of the electronegative substituents (here fluorine) on the addition direction of the $NH_2^-$-ion to substituted dehydrobenzenes (Ref 3). The mechanism of the catalytic exchange of the aromatically bound chlorine, as suggested by the 1st author (together with V. A. Kobelev, Ref 5), is recalled. According to this mechanism, the reaction starts with the addition of the catalyst to the molecule of the halogen derivative (see Scheme). In the addition product, the halogen is already very mobile, and reacts easily with ammonia whereby an amine is formed. Finally, some deliberations are made on the nature of the complex, on the basis of the above-mentioned results. There are 1 table and 6 references, 2 of which are Soviet.

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

On the Mechanism of Fluorochlorobenzene Amination by Metal Amides and Aqueous Ammonia SOV/20-127-6-22/51

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute for Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: May 27, 1959

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.

Reaction of 2,4-dinitrohalobenzenes with salts of carboxylic acids. Zhur. VKHO 5 no.6:708-709 '60. (MIRA 13:12)

1. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I.Mendeleyeva.
(Benzene) (Acids)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, N.N., mladshiy; YAKOBSON, G.G.; RUBINA, T.D.

Amination of polyhalo derivatives of benzene. Dokl.AN SSSR 134 no.4:821-823 O '60. (MIRA 13:9)

1. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva. 2. Chlen-korrespondent AN SSSR (for Vorozhtsov).
(Benzene) (Amination)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; VOROZHTSOV, N.N., ml.

Preparation of 2, 4-dinitrophenyl derivatives of tertiary alcohols. Zhur.VKHO 6 no.3:360 '61. (MIRA 14:6)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva. (Alcohols)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, ml., N.N.; YAKOBSON, G.G.; KRIZHECHKOVSKAYA, N.I.; D'YACHENKO, A.I.; SHIKANOVA, I.V.

Aromatic fluoro derivatives. Part 4: Substitution of chlorine for the nitro group in nitrohalo derivatives of benzene. Zhur. ob. khim. 31 no.4:1222-1226 Ap '61. (MIRA 14:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva.
(Benzena) (Nitro group) (Chlorine)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, ml., N.N.; YAKOBSON, G.G.; KRIZHECHKOVSKAYA, N.I.

Aromatic fluoro derivatives. Part 5: Nitration of fluorochlorobenzenes. Zhur. ob. khim. 31 no.4:1227-1229 Ap '61. (MIRA 14:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva.

(Fluorine organic compounds)
(Nitration) (Benzene)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, ml., N.N.; YAKOBSON, G.G.; DENISOVA, L.I.

Aromatic fluoro derivatives. Part 6: Catalytic reduction of aromatic fluoronitro compounds. Zhur. ob.khim. 31 no.4:1229-1232 Ap '61. (MIRA 14:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva.

(Fluorine organic compounds)
(Aniline) (Reduction, Chemical)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, N.N., mladshiy; YAKOBSON, G.G.; KRIZHECHKOVSKAYA, N.I.

Aromatic fluoro derivatives. Part 7. Preparation of fluorochlorobenzenes. Zhur.ob.khim. 31 no.5:1674-1678 My '61. (MIRA 14:5)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
(Benzene)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; RUBINA, T.D.; VOROZHTSOV, mladshiy, N.N.

Production of fluorophenols by hydrolysis of fluorohalobenzenes. Dokl. AN SSSR 141 no.6:1395-1396 D '61. (MIRA 14:12)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. 2. Chlen-korrespondent AN SSSR (for Vorozhtsov, mladshiy).
(Phenol) (Benzene)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; D'YACHENKO, A.I.; BEL'CHIKOVA, F.A.

Aromatic fluoro derivatives. Part 9: Diazotation of aromatic amines by nitrosyl boron fluoride. Zhur.ob.khim. 32 no.3: 849-853 Mr '62. (MIRA 15:3)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR i Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.
(Amines) (Diazotizatipn) (Fluorides)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

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D204/D307

5.3600

AUTHORS: Vorozhtsov, N.N. (Jr.), Sokolenko, V.A. and Yakobson, G.G.

TITLE: Aromatic derivatives of fluorine. XI. The preparation and reactions of 2-6, dinitrofluorobenzene (I)

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya, no. 10, 1962, 87-90

TEXT: The new compound I (b.p. 150-155°C/10 mm Hg, m.p. 60-61°C) was smoothly prepared in 76-81% yields by heating 2,6-dinitrochlorobenzene (II) with anhydrous KF at 190°C. The F atom is activated by the adjacent electron-attracting $NO_2$-groups and may be readily displaced by nucleophilic reagents (MeOH, EtOH, PhOH, α- and β-naphthols: PhSH, aniline, piperidine) in the presence of KF, to give the corresponding 2,6-dinitrophenyl derivatives in ~ 80-90% yields. 2,6-dichlorofluorobenzene was made in up to 60% yields by the action of chlorine on I at 230-240°C, by the stepwise replacement of the nitro groups. The intermediate product, 2-fluoro-3-

Card 1/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

Aromatic derivatives ... S/200/62/000/010/002/002
D204/D307

chloronitrobenzene, was also isolated. 1,2,3-Trichlorobenzene and 2,3-dichloronitrobenzene were similarly prepared from II. Chlorination of 2,6-dinitrohalogenobenzenes thus offers a method of obtaining benzene derivatives which are generally difficult to prepare. There are 2 tables.

ASSOCIATION: Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Organic Chemistry, Siberian Branch of the AS USSR, Novosibirsk)

SUBMITTED: July 23, 1962

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; DENISOVA, L.I.; KRASNOVA, L.B.

Aromatic fluoro derivatives. Part 10: 2,4,5-trihalostyrenes.
Zhur.ob.khim. 32 no.10:3131-3134 O '62. (MIRA 15:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR i Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Styrene)
(Fluorine compounds)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; IOFFE, A.E.; VOROZHTSOV, mladshiy, N.N.

Alkylation and arylation of aromatic amines in the presence of metal fluorides. Izv. SO AN SSSR no.3 Ser. khim. nauk no.1: 156-158 '63. (MIRA 16:8)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR i Khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva, Moskva.
(Amines) (Alkylation) (Arylation)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

VOROZHTSOV, N.N., mladshiy; PLATONOV, V.Ye.; YAKOBSON, G.G.

Preparation of hexafluorobenzene from hexachlorobenzene. Izv.AN SSSR.Ser.khim. no.8:1524 Ag '63. (MIRA 16:9)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

(Benzene derivatives)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

ANDREYEVA, M.A.; VOROZHTSOV, N.N., mladshiy; KRIZHECHKOVSKAYA, N.I.; STEPANOV, B.I.; YAKOBSON, G.G.

Substitution of halogen in azo compounds. Part 17: Reactions of polyhaloazo compounds. Using the reaction for establishing the structure of some aromatic halogen-containing compounds. Zhur.ob.khim. 33 no.3:988-991 Mr '63. (MIRA 16:3)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva i Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.
(Azo compounds)
(Halogen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; KOBRINA, L.S.; RUBINA, T.D.; VOROZHTSOV mladshiy, N.N.

Aromatic nucleophilic substitution. Part 1: Amination of polychlorobenzenes. Zhur.ob.khim. 33 no.4:1273-1277 Ap '63. (MIRA 16:5)

1. Novosibirskiy institut organicheskiy khimii Sibirskogo otdeleniya AN SSSR.

(Benzene) (Amination)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

KOBRINA, L.S.; YAKOBSON, G.G.

Aromatic nucleophilic substitution. Part 2: Pentachlorophenol, pentachlorothiophenol, and their methyl ethers. Zhur.ob.khim. 33 no.10:3309-3312 O '63. (MIRA 16:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

MOLIN, Yu.N.; KULAKOVA, G.I.; PLATONOV, V. Ye.; YAKOBSON, G.G.

Nuclear magnetic resonance spectra of polyfluorochlorobenzene fluorine. Zhur. strukt. Khim. 5 no.5:781-783 S-O '64 (MIRA 18:1)

1. Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya AN SSSR i Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SEMIN, G.K.; ROBAS, V.I.; KOBRINA, L.S.; YAKOBSON, G.G.

Nuclear quadrupole resonance spectra of $Cl^{35}$ and $Br^{79}$ of halo derivatives of benzene of the $C_6X_5Y$ types. Zhur. strukt. khim. 5 no.6:915-918 N-D '64. (MIRA 18:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

GERSHTEYN, N.A.; BEREZOVSKIY, G.A.; YAKOBSON, G.G.

Gas-liquid chromatography of aromatic compounds. Part 1: Halobenzenes. Izv. SO AN SSSR no.7 Ser. [illegible] nauk no.2: 111-116 '64 (MIRA 18:1)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 52604-65 EWT(m)/EPF(c)/EPR/EWP(t)/EWA(c) Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5015861 UR/0063/64/009/006/0702/0704

AUTHOR: Yakobson, G. G.; Shteyngarts, V. D.; Vorozhtsov, N. N., Jr.

TITLE: Reaction of octafluoronaphthalene with nitric acid

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 9, no. 6, 1964, 702-704

TOPIC TAGS: fluorinated organic compound, naphthalene, nitric acid

Abstract: The reaction of octafluoronaphthalene with concentrated nitric acid at 50°C produced tetrafluorophthalic acid and a water-insoluble light yellow product with the composition $C_{10}F_6O_2$ (m.p. 273.5-274.5°C), to which the structure of hexafluoro-1,4-naphthoquinone was assigned. A study of the reaction of octafluoronaphthalene with concentrated nitric acid under milder conditions (0°C) revealed that tetrafluorophthalic acid is formed an intermediate product with the composition $C_{10}F_7NO_3$, which was assigned the structure of 1-keto-2-nitroheptafluoro-1,4-dihydronaphthalene. A reaction scheme is proposed for the formation of this quinonitrol. Orig. art. has 3 formulas.

Card 1/2

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

L 52604-65
ACCESSION NR: AP5015861

ASSOCIATION: Novosibirskiy institut organicheskoy khimii SO AN SSSR (Novosibirsk Institut of Organic Chemistry, SO AN SSSR)

SUBMITTED: 24Apr64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 004 OTHER: 006 JPRS

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; SHTEYNGARTS, V.D.; BEREZOVSKIY, G.A.

Aromatic fluorine derivatives. Part 12: Reaction of fluohalobenzenes with aluminum chloride. Zhur. ob. khim. 34 no. 3:932-936 Mr '64. (MIRA 17:6)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; RUBINA, T.D.; VOROZHTSOV, N.N. Mladshiy

Aromatic fluorine derivatives. Part 13: Hydrolysis of fluohalobenzenes. Zhur. ob. khim. 34 no. 3:936-941 Mr '64. (MIRA 17:6)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; ODINOKOV, V.N.; PETROVA, T.D.; VOROZHTSOV, N.N., mladshiy

Aromatic fluorine derivatives. Part 14: Tetrafluoroterephthalic acid. Zhur. ob. khim. 34 no.9:2953-2958 S '64.

(MIRA 17:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; SHTEYNGARTS, V.D.; FURIN, G.G.; VOROZHTSOV, N.N., mladshiy

Reaction of hexafluorobenzene with aqueous ammonia. Zhur. ob. khim. 34 no.10:3514 O '64. (MIRA 17:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; PETROVA, T.D.; KANN, L.I.; SAVCHENKO, T.I.; PETROV, A.K.; VOROZHTSOV, N.N., mladshiy

Production of fluorinated heterocyclic compounds from hexafluorobenzene. Dokl. AN SSSR 158 no.4:926-928 O '64.

(MIRA 17:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. 2. Chlen-korrespondent AN SSSR (for Vorozhtsov).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; SHTEYNGARTS, V.D.; MIROSHNIKOV, A.I.; VOROZHTSOV N.N., ~~mladshiy~~.

Some reactions of decafluorobiphenyl. Dokl. AN SSSR 159 no.5: 1109-1112 D '64 (MIRA 18:1)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. 2. Chlen-korrespondent AN SSSR (for Vorozhtsov, mladshiy).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; SHTEYNGARTS, V.D.; VOROZHTSOV, N.N., mladshiy

Preparation of octafluoronaphthalene and decafluorobiphenyl. Izv. AN SSSR. Ser. khim. no.8:1551 Ag '64. (MIRA 17:9)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; PETROV, V.P.

Polarographic reduction of dihalobenzenes. Izv. SO AN SSSR no.7 Ser. khim. nauk no.2:75-80 '65. (MIRA 18:12)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. Submitted April 24, 1964.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SEMIN, G.K.; ROBAS, V.I.; SHTEYNGARTS, V.D.; YAKOBSON, G.G.

Nuclear quadrupole resonance spectra of $Cl^{35}$ of polyfluorochlorobenzene molecular compounds. Zhur. strukt. khim. 6 no.1:160-161 Ja-F '65.

(MIRA 18:12)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted June 10, 1964.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; VLASOV, V.M.; VOROZHTSOV, N.N., mladshiy

Interaction of aromatic sulfofluorides with potassium fluoride. Zhur.VKHO 10 no.4:466-467 '65.

(MIRA 18:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

MOLIN, Yu.N.; PETROV, A.K.; KULAKOVA, G.I.; YAKOBSON, G.G.

Analysis of polyfluorochlorobenzene mixtures by the methods of nuclear magnetic resonance and infrared spectroscopy. Zhur. anal. khim. 20 no.3:396-397 '65. (MIRA 18:5)

1. Institut khimicheskoy kinetiki i goreniya i Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

SOKOLENKO, V.A.; ORLOVA, L.V.; GERSHTEYN, N.A.; YAKOBSON, G.G.

Kinetics of the reaction of hexafluorobenzene with sodium methylate. Kin. i kat. 6 no.2:365 Mr-Ap '65. (MIRA 18:7)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; KOBRINA L.S.; VOROZHTSOV mladshiy, N.N.

Aromatic nucleophilic substitution. Part 4: Reaction of pentachloro derivatives of benzene with sodium methylate. Zhur. ob. khim. 35 no.1:137-141 Ja '65. (MIRA 18:2)

1. Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; KOBRINA, L.S.; BELOVA, L.F.; VOROZHTSOV mladshiy, N.N.

Aromatic nucleophilic substitution. Part 5: Reaction of polychlorobenzenes with an aqueous solution of dimethylamine. Zhur. ob. khim. 35 no.1:142-145 Ja '65. (MIRA 18:2)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.G.; PLATONOV, V.Ye.; VOROZHTSOV, N.N., mladshiy

Aromatic fluoro derivatives. Part 16: Preparation of hexafluorobenzene and polyfluorochloro derivatives of benzene. Zhur. ob. khim. 35 no.7:1158-1161 Jl '65. (MIRA 18:8)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G. I., ENG.

Electric Power Plants

Movable end wall for the generator room.
Elek. sta. 23 no. 8, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFED.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

ZOTOV, V.I., inzh.; YAKOBSON, G.I., inzh.

Concerning the construction of the boiler chasis within the framework of the boiler plant. Elek. sta. 32 no.2:87-89 F '61. (MIRA 16:7)

(Boilers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

ACC NR: AP7001453 (N) SOURCE CODE: UR/0413/66/000/021/0195/0195

INVENTORS: Livshits, A. L.; Moroz, I. I.; Alekseyev, G. A.; Yakobson, G. M.; Kuznetsov, B. V.

ORG: none

TITLE: A method for electrochemical working of external surfaces of large details. Class 48, No. 188251 [announced by Experimental Scientific Research Institute of Metal Cutting Machines (Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 195

TOPIC TAGS: metalworking, metalworking machinery, metal electroforming, electrode

ABSTRACT: This Author Certificate presents a method for working external surfaces of large details by using a source of pulsed direct current. To apply a small power current source, the treatment is carried out by an electrode-tool moving along the external surface of the detail (see Fig. 1). The working surface of this tool is considerably smaller than the worked surface of the detail.

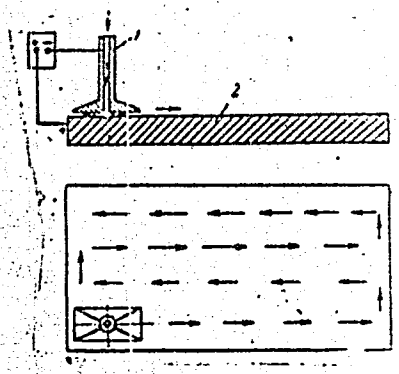
Card 1/2 UDC: 621.9.047.7

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

ACC NR: AP7001453

Fig. 1. 1 - electrode-tool; 2 - detail




Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 27Nov64

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.M.

Effectiveness of sugar-beet production in the principal capitalistic countries. Sakh.prom.30 no.1:71 Ja '56. (MIRA 9:6)
(Sugar beets)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

POLEZHAYEV, Valentin Nikolayevich; YAKOBSON, Gustav Maksimovich; YERMACHKOVA, G.S., red.izd-va; PAVLOVSKIY, A.A., tekhn. red.

[International economic organizations and agreements] Mezhdunarodnye ekonomicheskie organizatsii i soglasheniia. Moskva, Vneshtorgizdat, 1961. 265 p. (MIRA 14:9)
(International organizations) (Commercial treaties)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G. P.: ~~Master~~ Cand Geolog-Mineralo Sci (diss) -- 'The formation of hydrogen-sulfide waters in the Kemeri deposits". Riga, 1958. 16 pp (Acad Sci Latvian SSR, Inst of Geology and Useful Minerals), 150 copies (KL, No 6, 1959, 128)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G. P.

YAKOBSONS, G.

GENERAL
PERIODICALS: VESTIS No. 1, 1958

JAKOBSONS, G. Role of marshes in forming the sources of hydrogen sulfide waters. In Russian. p. 155.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.P.

Network of observatory hydrogeological in the U.S.S.R. Geol. nefti i gaza 7 no.7:47-49 Jl '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.

(Water, Underground)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.P.; SUBBOTA, M.I.; PRADED, M.G.; KOVALEVSKIY, V.S.

Hydrogeological study of deep aquifers and the creation of a regional net of observation wells. Razved. i okh. nedr. 30 no.10:42-46 O '64. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut, Moskva (for Yakobson, Subbota, Praded).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii, Moskva (for Kovalevskiy).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

YAKOBSON, G.P.; KACHALOV, Yu.M.

Method for calculating the reduced pressures of formation waters in water drive systems. Geol. nefti i gaza 9 no.6:49-58 Je '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut, Moskva.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6

KOLPAKOV, M.G.; POLYAK, M.G.; YAKOBSON, G.S.

Role of the adrenals in the restoration of vital functions following clinical death. Biul. eksp. biol. i med. 47 no.3:21-27 Mr '59. (MIRA 12:7)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent G. L. Lyuban) Novosibirskogo meditsinskogo instituta (dir. - prof. G. S. Zalesskiy Predstavlena deystvitel'nym chlenom AMN SSSR V. N. Chernigovskim.

(RESUSCITATION,
eff. of adrenalectomy on restoration of vital funct. after clin. death in exsanguinated animals (Rus))

(ADRENALECTOMY, effects,
on restoration of vital funct. after clin. death in exsanguinated animals (Rus))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001961830007-6"