

PETROV, A.M., prof.; DUBNITSKIY, A.A., kand.veterinarnykh nauk

Epizootiology of diphyllobothriasis in common foxes and polar foxes on the state fur farms of Moscow Province. Trudy VIGIS 6:57-70 1959. (MLPA 15:5)

(Moscow Province--Diphyllobothrium)
(Parasites--Foxes)

PETROV, A.M., prof., doktor veterinarnykh nauk; SAVINOV, V.A., kand.
biologicheskikh nauk

Helminths of moles (*Talpa europaea* L.) in Kalinin Province.
Trudy VIGIS 6:160-166 '59. (MED 15:5)
(Parasites--Moles (Animals))
(Kalinin Province -worms, intestinal and parasitic

PETROV, A.M., prof., doktor veterinarnykh nauk; CHESTOVA, A.N.,
kand.biologicheskikh nauk

Investigation of the helminths of moles in the U. S. S. R.
Trudy VIGIS 6:167-176 '59. (MIRA 15:5)
(Worms, Intestinal and parasitic)
(Parasites--Moles (Animals))

PETROV, A.M.; SADYKHOV, J.A.

New nematode (*Trichocephalus lenkorani* nov. sp.) from the
intestines of a porcupine in Azerbaijan. Dokl. Akad. Nauk Azerb. SSR 17
no. 6:631-634 1961. (MIRA 12:11)

1. Institut zoologii AN AzerSSR. Predstavleno akademikom A.
AzerSSR A.N. Derzhavina.
(Lenkoran Lowland--Nematoda)

PETROV, A.M., inzh.; LUKASHEVA, T.T., inzh.

Expenditure of spare parts and materials on capital and operational repairs of the SM-17A, SM-17A and S-182A stone crushers. Stor. inv. (MIRA 1970)
NIIZHelezobetona no.3:134-146 '70.
(Stone and ore breakers--Maintenance and repair)

S/056/62/043/001/001/056
3125/3102

AFILAK: Petrov, A. M.

TIIBS: Angular distribution of α -particles from the $Li^7(p,\alpha)He^4$ reaction

ABJUBIAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 1(7), 1962, 66-69

TEXT: A proton beam from the cyclotron of the Fiziko-tekhnicheskiy Institut AN SSSR (Physicotechnical Institute AS USSR) was focused in a vacuum chamber by two quadrupole lenses onto targets of metallic lithium and aluminum foil covered with lithium. The resulting alpha particles were recorded at $10-170^\circ$ relative to the target, using nuclear photoplates of type T-2 (T-2). The angular distribution of the alphas in the center-of-mass system can be described by $I(\theta) = I(90^\circ)(1 + A(B)\cos^2\theta + B(D)\cos^4\theta)$, where θ denotes the angle of emission of the alpha particles in the center-of-mass system. The coefficients A and B were calculated by the method of least squares and are shown as functions of E_p . The dotted lines were

Part 1/2

Angular distribution of ...

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 P_2 angular ...
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 6 figures.

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... February 28, ...
 Card 2, 4

SKRYABIN, K.I., akad., Geroy Sotsialisticheskogo truda, Laureat Leninskoy i Gosudarstvennykh premiy; SHIKHOBALOVA, N.P.; PETROV, A.M.; LEVASHOV, M.M.; GUSHANSKAYA, L.Kh., red. izd-va; NOVICHKOVA, N.D., tekhn. red.; LAUF, V.G., tekhn. red.

[Development of theoretical and practical helminthology in the U.S.S.R.] Stroitel'stvo hel'mintologicheskoi nauki i praktiki v SSSR. Moskva, Izd-vo Akad. nauk SSSR. Vol.1. 1962. 295 p.
(MIRA 15:5)

(Helminthology)

PETROV, A.M.

Simple laboratory automatic 24-hour measuring apparatus for small concentrations of carbon monoxide. Trudy LSGMI no. 50 149-152 '60.
(MI A 14:11)

(AIR--ANALYSIS)

(CARBON MONOXIDE)

PETROV, A.M.

Round-the-clock automatic measuring apparatus for small concentrations of sulfur dioxide. Trudy LSCMI no.58:153-157 '60.

(MFA 14:11)

(AIR--ANALYSIS)

(SULFUR DIOXIDE)

SKRYAPIN, Konstantin Iy-novich, akademik, SHIKHOBALOVA, Nadezhda
Pavlovna, PETA V, Aleksandr Mikheylovich; LEVASHOV
Mikhail MIKHEYLOVICH, GUSHANSKAYA, L.Kh., red., PRYKINA,
Ye.T., red. izd-va, DOROKHINA, I.N., tekhn. red

[Development of helminthological science and practice in the
U.S.S.R.] Stroitel'stvo gell'mintologicheskoi nauki i prakti-
ki v SSSR. Moskva, Izd-vo AN SSSR, 7 1/2. 1963. 415 p.
(MIRA 15.11)

(Helminthological research)

ORLOV, Vasil'y Vasil'yevich; PONOMARENKO, **Aleksey** Kus'mich; GUDZ',
Aleksandr Grigor'yevich; PETROV, **Anatoliy** Moiseyevich;
TARASENKO, Vasil'y Konstantinovich; SIDYAK, A.Ya., otv.
red.; VAYNBERG, D.A., red.; PLETENITSKIY. V.Yu., tekhn. red.

[Handbook of examples and problems on mining engineering]
Sbornik primerov i zadach po provedeniiu gorn'nykh vyrabotok.
Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M.Gor'kogo,
1961. 352 p. (MIRA 15:2)
(Blasting) (Mining engineering)

PETROV, A.M.

Brief news: First conference on the conservation of nature in the
Yakut A.S.S.R. Okhr. prir. i zapov. delo v SSSR no. 6:125-131 '60.
(MIRA 14:5)

1. Yakutskiy filial Sibirskogo otdeleniya AN SSSR.
(Yakutia—Natural resources)

MALYSHEV, B.D., inzh.; PETROV, A.M., inzh.; KUZ'MIN, Yu.P., tekhn.

Formation of cracks in welding 14G2 steel construction elements.
Mont. i spets. rab. v stroit. 23 no. 2-18-21 F '61.

(MIRA 14:1)

1. Institut Proyektstal'konstruktsiya.
(Steel Structural-Welding)

PETROV, A.M.; BOROVKOVA, A.M.

Study of the epizootology of toxascariasis in blue foxes.
Trudy VIGIS 7:53-59 '59. (MIRA 13:11)
(Foxes--Diseases and pests) (Ascarids and ascariasis)

PETROV, A.M.; CHERTKOVA, A.N.

Distinctive features of alveolar and monocellular echinococcus
as revealed by larval and adult forms. Trudy VIGIS 7:129-139
'59. (MIRA 13:11)

(Hydatids)

ИЗТОВ, Arkady Mikhailovich; АКАДЕМИК, чл.-кор., ств. ред.;
КОНДРАТ'YEVA, V.P., инж.

Prevention of accidents on line of telegraph and communication lines. English translation of the Russian radiofizitsii i svyazi. Moskva, izd-vo "svyaz'," 1964.
38 p. (CIA 17:1)

KORNEVA, Yelena Andreevna; 1927, A.S., ed.

[Evolution of the reflex regulation of cardiac activity]
Evolutsiia reflektornoi regulatsii serdtsnoi deiatel'-
nosti. Leningrad, Meditsina, 1966. 249 p.

(MIRA 18:9)

L 167h-66 EWT(1) IJP(c) GG

ACCESSION NR: AP5021941

UR/0126/65/020/002/0297/0299

AUTHOR: ^{44,55} Retrov, A.N.; ^{44,55} Taluts, G. G.

539.293:537.3.01

38
35
B

TITLE: On the quantum theory of the tensor of permittivity in a strong electrical field
^{21.44,55}

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 2, 1965, 297-299

TOPIC TAGS: permittivity tensor, quantum theory, electrical field, strong electrical field, lattice period, free path time, absorption factor, electromagnetic wave

ABSTRACT: The permittivity tensor of an electron gas present in a periodic lattice field within a strong electrical field is considered. The electrical field F is regarded as strong if the oscillation period of electron energy $T = 2\pi h/eF$ (where a is the lattice period) is shorter than the free-path time τ . In real conditions this requirement apparently is satisfied only for current carriers in narrow zones. Accordingly, the authors consider at first the case of a narrow zone when constructing the permittivity tensor $\epsilon_{ij}(\omega, q)$ for a strong electrical field. The formula for the tensor is written on the basis of wave functions

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ACCESSION NR: AP5021941

derived for a simple cubic lattice, on taking into account particle density, electron velocity along the i axis, and the electron distribution function. In addition general expressions for the absorption factors of electromagnetic waves are derived and the formula of the permittivity tensor is correspondingly refined to

$$\epsilon_{ij}(\omega, q) = \delta_{ij} \left(1 - \frac{4\pi e^2 N}{m \omega^2} \right) - \frac{4\pi e^2}{\omega^2} \sum_{\omega'} \frac{f_{01}(E_{s'1}) - f_{02}(E_{s2})}{E_{s'1} - E_{s2} - \hbar\omega - i\hbar\Gamma} \times \quad (1)$$

$$\times v_i(s'1, s2, -q) v_j(s'1, s2, q).$$

where the subscripts 1, 2 are zone numbers. The absorption factor for the frequencies satisfying the condition $E_g - \hbar\omega \gg aF$ (E_g is the width of the forbidden zone) equals

$$\gamma = \frac{2\pi e^2 |v|^2}{\omega c \sqrt{\epsilon(E_g - \hbar\omega)}} \exp \left(-\frac{E_g - \hbar\omega}{aF} \ln \frac{E_g - \hbar\omega}{\sqrt{a_1^2 + a_2^2 - 2a_1 a_2 \cos \frac{qa}{2}}} \right) \quad (2)$$

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ACCESSION NR: AP5021941

3

The frequency dependence of γ is close to that obtained by Keldysh (ZhETF, 1958, 34, 1138) and Callaway (J. Phys. Rev., 1963, 130, 549; 1964, A134, 998). Thus the presence of an exponential frequency-dependence of the absorption factor is confirmed. Orig. art. has: 8 formulas.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Metal Physics AN SSSR)

SUBMITTED: 17Feb65

ENCL: 00

SUB CODE: EM, NP

NO REF SOV: 004

OTHER: 003

Card 3/3 DP

VARGONYEV, Serafim Pavlovich; PETROV, A.N., red.; RUMOV, S.A., red.

[Treatment of epilepsy] Leczenie epilepsii. Leningrad,
Leningradskoe, Meditsina, 1965. 108 p. (MIRA 1811.)

6(4); 24(1)

PHASE I BOOK EXPLOITATION

SOV/3311

Leningrad. Gosudarstvennyy nauchno-issledovatel'skiy institut radio-
veshchatel'nogo priyema i akustiki. Otdel nauchno-tekhnicheskoy informatsii

Nauchno-tekhnicheskiy sbornik; trudy, vyp. 10 (Scientific and Technical
Collection; Transactions, No. 10) Leningrad, 1958. 96 p. Errata slip
inserted.

Editorial Commission: V.K. Yofe, B.I. Zinov'ev (Deputy Resp. Ed.),
B.Sh. Fissel'gof, N.S. Kupriyanov, Ye.K. Smetanina, K.K. Popov (Resp.
Ed.), A.T. Prokhorov, B.I. Semenov, and V.V. Titkov; Ed.: R.Ya. Finkel'-
shteyn; Tech. Ed.: A.A. Genkin.

PURPOSE: This collection of articles is intended for specialists in the
field of radio broadcasting reception and acoustics.

COVERAGE: This collection contains four works on the following subjects:
the use of ferrimagnetic antennas in vacuum-tube and transistorized
radio broadcasting receivers, measurements of the mean standard sound
pressure of low-capacity cone loudspeakers, new methods of determining

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Scientific and Technical Collection (Cont.)

SOV/3311

tolerances for components of electromechanical filters with lumped and distributed constants, quality indices of a nonlinear bridge with a diode which is used as a measuring component in the control circuit of a low rectified voltage regulator. References are given after each article.

TABLE OF CONTENT :

Kalikhman, S.C. Ferromagnetic Receiving Antennas 3

The author investigates the advantages obtained in using ferromagnetic antennas (a variety of loop antennas) in vacuum-tube and transistorized radio receivers. He compares magnetic antennas with electric rod antennas and explains why the former have a higher noise-rejecting feature than the latter. However, this is obtained only when the antenna effect in the magnetic antenna becomes insignificant. The author outlines some efficient methods for reducing that effect for various types of receivers and various wave lengths. He thanks N.Y. Maksimova, Senior Engineer, and Ye.M. Kondrat'yev, Head of Section, NII (Scientific Research Institute) for their help. There are 10 article references.

Card 24

Scientific and Technical Collection (Soviet)

SOV, 3311

Dombrovskiy R., and N. Yefimova. *Problem of Measuring the Mean Standard Sound Pressure of Loudspeakers by the Reciprocity Method* 19

The authors present the results of measuring the mean standard sound pressure of low-capacity cone loudspeakers. In their tests the authors used the reciprocity method in live space conditions, according to GOST 7323-55. An analysis of shortcomings revealed, and of methods of reducing them, is presented. Maximum permissible errors of these measurements are determined. The authors consider the method suitable for loudspeaker calibration in plant laboratories. They thank V.K. Iofe for his help. There are 27 references: 11 Soviet and 16 English (6 are translated from English).

Petrov, A.N. *Tolerances For Components of Electromechanical Filters* 36

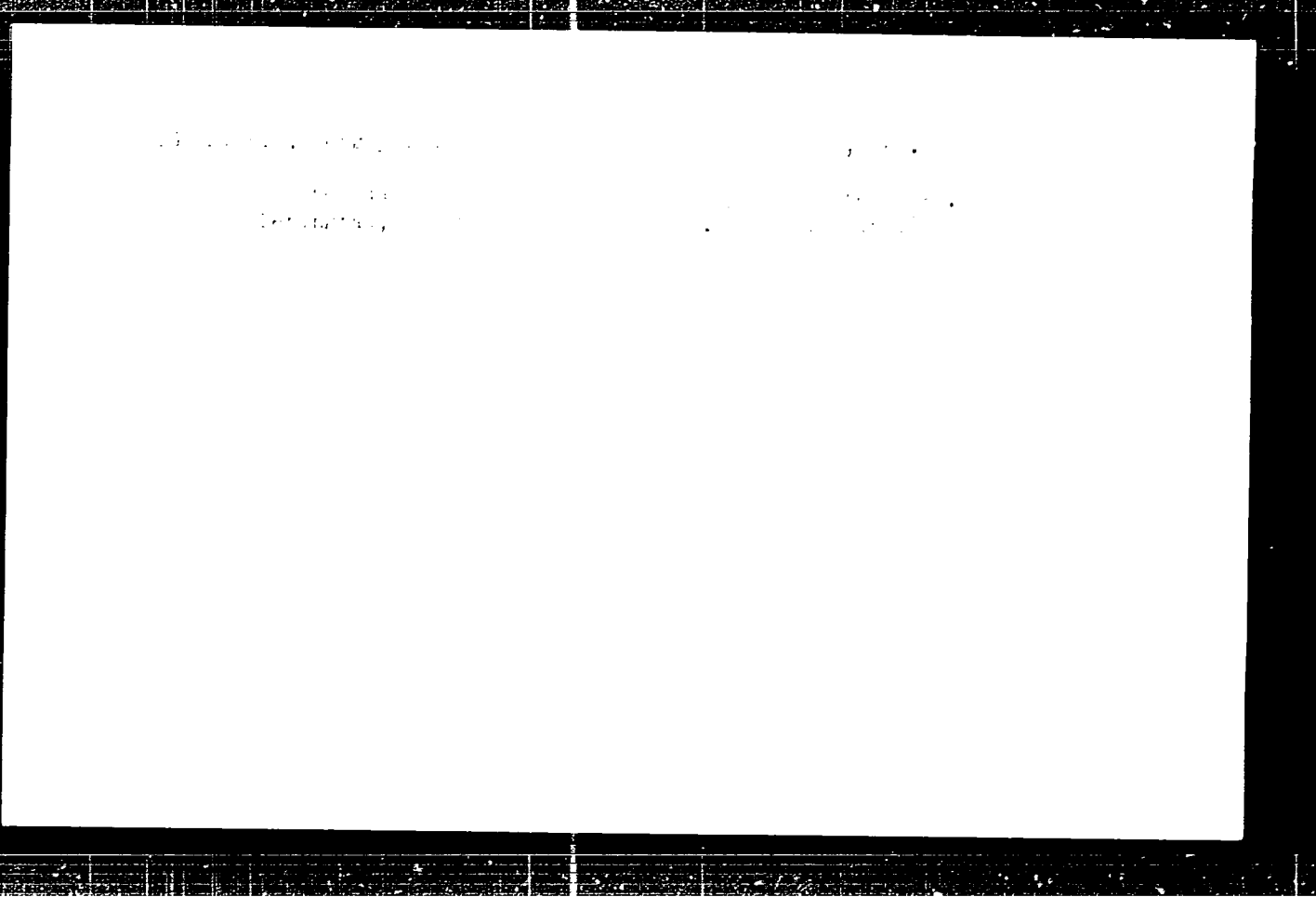
The article is devoted to the theoretical investigation of the precision required in the production of components of oscillatory systems in electromechanical filters. The author investigates modern methods of determining tolerances in components of electric filters with lumped constants, outlines a method of calculating tolerances in filters with distributed constants and develops formulas for the calculation of these

Card 3/4

KHOLDIN, S.A., prof., otv. red.; RAKOV, A.I., prof., red.;
LAZAREV, N.V., zacl. deyatel' nauki prof., red.;
TOSILEVICH, V.F., prof., red.; NECHAYEVA, I.D., doktor
med. nauk red.; KAUFMAN, B.D., kand. med. nauk, red.;
SHABASHOVA, N.Ya., kand. med. nauk, red.; PETROV, A.N.,
red.

[Current problems of oncology; festschrift for the 70th birthday and the 45th anniversary of the scientific and civic activity of Member of the Academy of Medical Sciences of the U.S.S.R. Professor Aleksandr Ivanovich Serebrov, and consisting of papers by his students and coworkers, as well as by distinguished scientists in the field of cancer control] Sovremennye problemy onkologii; sbornik posviashchen 70-letiiu so dnia rozhdenia i 45-letiiu nauchnoi i obshchestvennoi deiatel'nosti deistv. chl. AMN SSSR professora Aleksandra Ivanovich Serebrova i sostoit iz rabot ego uchenikov i sotrudnikov, a takzhe vidnykh uchenykh - soratnikov po protivorakovoi bor'be. Leningrad, Meditsina, 1965. 245 p. (MIRA 18:6)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut onkologii. 2. Chlen-korrespondent AMN SSSR (for Kholdin, Rakov).



KADEKIN, V.P.; PETROV, A.N.

Large reinforced concrete sheet pile. Transp. stroi. ll no. 1:
20-22 My '61. (MEA 14:6)

1. Nachal'nik UNR No.376 Baltmorgidrostroya (for Kadekin).
2. Instruktor Rizhskoy normativno-issledovatel'skoy stantsii
Orgtransstroya (for Petrov).
(Sheet piling) (Concrete piling)

PETROV, Andrey Nikolayevich; SHMATCHENKO, Vladimir Filippovich; BERGMAN,
P.Ya., red.; ZHITNIKOVA, O.S., tekhn. red.

[Electromechanical radiofrequency band filters] Polosovye elektro-
mekhanicheskie fil'try radiochastot. Moskva, Gos. energ.izd-vo,
1961. 299 p. (MIRA 14:11)

(Radio filters)

TAL'MAN, Izrail' Moiseyevich; PETROV, A.N., red.; KHARASH, G.A.,
tekhn. red.

[Varicose dilatation of the veins of the lower extremities]
Verikoznoe raashirenje ven niznikh konechnostei. Leningrad,
Medgiz, 1961. 140 p. (MIRA 15:3)

(VARIX)

NOVIKOV, I.T.; PAVLENKO, A.S.; SMIRNOV, M.S.; CHIZHOV, D.G.; LAVRENIENKO,
K.D.; NEKRASOV, A.M.; NOSOV, R.P.; TARASOV, N.Ya.; ZHIMERIN, D.G.
UGORETS, I.I.; DMITRIYEV, I.I.; DROBYSHEV, A.I.; YERPAKOV, V.S.;
SAPOZHNIKOV, F.V.; BOROVYI, A.A.; BANNIK, V.P.; DASKOVSKIY, Ya.M.;
ROGOVIN, N.A.; PETROV, A.N.; MEL'NIKOV, B.V.; LATYSH, D.I.;
KONIN, P.P.; DYDYKIN, P.Ye.; BONDAREV, I.I.; GUMENYUK, D.L.;
POREGAYLO, K.M.

Ol'ga Sergeevna Kalashnikova; obituary. Elek. sta. 30 no.2:95
F '59. (MIRA 12:3)

(Kalashnikova, Ol'ga Sergeevna, 1914)

PHASE I BOOK EXPLOITATION

SOV/5918

Petrov, Andrey Nikolayevich and Vladimir Filippovich Shmatchenko

Polosovyye elektromekhanicheskiye fil'try radiochastot (Electromechanical Radiofrequency Band-Pass Filters) Moscow, Gosenergoizdat, 1961. 299 p. 6500 copies printed.

Ed.: P.Ya. Bergman; Tech. Ed.: O.S. Zhitnikova.

PURPOSE: This book is intended for scientific personnel and engineers working in the fields of telephone, telegraph, and radio engineering. It may also be useful to advanced students specializing in related subjects at schools of higher education.

COVERAGE: The book deals with the theory, the design calculation, and the technological manufacturing processes of electromechanical oscillating systems used in radio engineering, principally electromechanical i-f filters operating in the 50 kc to 1 Mc range. Problems of adjusting, regulating, and testing electromechanical filters are also discussed. The authors thank D.N. Shapiro,

Card 1/1

S/126/60/009/03/002/033
EO32/E414

AUTHORS: Petrov, A.N., Taluts, G.G. and Gitterman, M.Sh.
TITLE: On the Theory of the Stark Effect for Excitons in Ionic Crystals

PERIODICAL: Fizika metallov i metallovedeniye 1960 Vol 9, Nr 3, pp. 327-331 (USSR)

ABSTRACT: In a previous paper (Ref 1) the authors considered the interaction of excitons with lattice vibrations. The aim of the present note is to generalize that calculation to the case when an external electric field is present. The shift of the energy levels of the exciton in the external field was considered by Korenblit (Ref 2), Samoylovich and Korenblit (Ref 3) and Gross et al (Ref 4) using the single particle approach but they did not include electron-electron and electron-phonon interactions which in general, will have an effect on the dependence of the energy level shift on the external field. In the present note, the excitons are looked upon as Bose-type collective excitations of a many-electron system. Using the Hamiltonian given by Eq (2) it is shown that if the electron-electron and electron-phonon

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S/126/60/009/03/002/033
E032/E414

On the Theory of the Stark Effect for Excitons in Ionic Crystals

interactions are taken into account a linear effect appears in addition to the quadratic effect. In the order of the Stark effect is reduced. Existing experimental data do not resolve the problem as to whether the level shift dependence on the field is linear or quadratic but do indicate that there is a reduction in the order of the Stark effect as compared with isolated atoms. There are 7 references, 6 of which are Soviet and 1 English.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

SUBMITTED: September 12 1959

Card 2/2

PETROV, A. N.

Automatic regulator of the temperature of sealing wax. Spirt. prom.
21 no. 3:42-43 '55. (MIRA 8:12)

1. Leningradskiy likero-vodochnyy zavod
(Electric apparatus and appliances)

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; GANICHEV, I.A.; LAVRENIENKO, K.D.;
FINOGENOV, Ya.I.; ALEKSANDROV, D.Ya.; SERDYUKOV, N.P.;
KUDRYAVTSEV, L.N.; PETROV, A.N.; BANNIK, V.P.; VOLKOV, I.M.;
MEL'NIKOV, B.V.; STAROSTIN, I.A.; BUBNOVSKIY, G.A.; SUVORIN,
F.Ya.; GRITSAY, B.I.; SKUPKOV, A.A.; BAMSHTEYN, Ye.B.; TURCHIN,
N.Ya.

IUrii Nikolaevich Pongil'skii; obituary. Energ. stroi.
no.27;99 '62.

(Pongil'skii, IUrii Nikolaevich, 1925-1962) (MIRA 15:9)

PETROV, A. N.

1A 21, 1977

USSR/Engineering
Furnaces, Metallurgical
Cast Iron

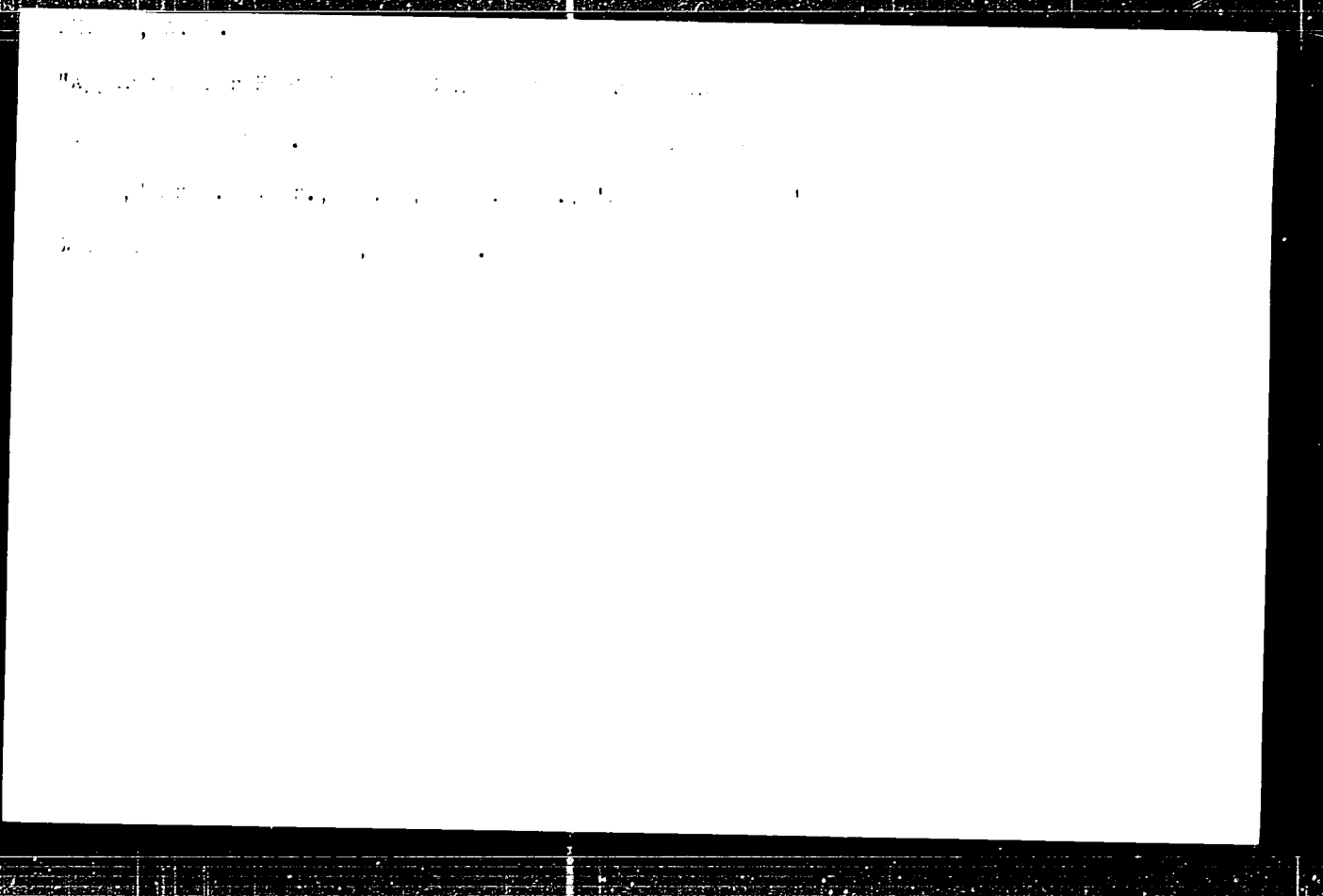
Sep 48

"Petrovskiy Furnaces," A. N. Petrov, Engr, 3 pp

"Vest Mashinostroy" Vol XXVIII, No 9

Describes subject furnace in detail. It is cross
between cupola and ordinary liquid-fuel furnace.
It is widely used at petroleum machine-building
plants in Baku and elsewhere for melting cast iron.
Includes four sketches.

27 120777



A.

The Chemistry and Metabolism of the Adrenal and Pancreatic
Glands in Man. Moscow, 1964. 100 pages. 1000 copies.

PETROV, A.N., kand.med.nauk

Our experinece with potentiation in local novocaine anaesthesia.
Zdrav. Belor. 5 no.11:52-53 N '59. (MIRA 13:3)

1. Iz Okruzhnogo gospiatalya (nachal'nik gospiatalya M.V. Khiteyev).
(LOCAL ANESTHESIA)

[Faint, illegible text, possibly bleed-through from the reverse side of the page]

ZOTOV, A.P.; CHUMAKOV, M.P.; MARKOV, A.A.; STEPANOVA, N.I.; PETROV, A.N.

Experimental induction and serological investigations of Q fever.
Veterinariia 33 no.7:44-53 J1 '56. (MIRA 9:9)
(Q fever)

PETROV, A. P.

Issledovanie dvukhputnogo grafika v sviazi s prokladkoj passazhirsikh poezdov.
[Survey of two-way schedule in connection with running of passenger trains]. Pod
obshchey red. V.N. Obratsova i B.E. Peisakhzona. Moskva, Gos. Transp. zhel-dor. izd-
vo, 1941. 110 p. illus. (Nauchno-issledovatel'skii institut zheleznodorozhnogo
transporta. [Izdaniia] vyp. 86).

DLC: TF653.P47

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
Reference Department, Washington, 1952 Unclassified

PETROV, A.

Marshrutizatsiia i plan formirovaniia - vaz'neishie sredstva uskoreniia oborota vagona.
/ Special destination trains and the formation plan are the most important means for
accelerating car turnover/. (Zhel dor. transport, 1944, no. 8 9, p. 25).

DLC: HE7.25

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
Reference Department, Washington, 1952 Unclassified

PETROV, A. P.

"Plan for Assembling Trains. Experience, Theory, Procedure for Planning,"
Moscow, 1950

PETROV, A.P., prof.

Ways for further acceleration of the circulation of railroad cars.
Sbor. trud. Akad. zhel. transp. no.1:34-46 '52. (MIRA 11:3)
(Railroads--Management)

ZAGLYADIMOV, Dmitriy Petrovich; PETROV, Aleksandr Petrovich; SERGEYEV,
Yevgeniy Stepanovich; BERNGARD, K.A., redaktor; KHITROV, P.A.,
tekhnicheskii redaktor

[Traffic control in railroad transportation] Organizatsiia dvizheniia
na zheleznodorozhnom transporte. Izd. 3-e. Moskva, Gos. transp.zhel-
dor. izd-vo, 1956. 642 p. (MIRA 10:?)
(Railroads--Traffic)

PETROV, A.P., professor.

Problem of train movement without stopovers in relation to utilizing
traffic capacity. Sbor.trud.Akad.zhel.transp. no.4:100-110 '56.
(Railroads-- Station service) (MLRA 16:2)

~~PETROV, A. P.~~

Basic scientific problems in operating the railroads of the U.S.S.R.
and ways of solving them. Vest. TSNII MPS 16 no.4:6-16 Je '57.

(MLRA 10:8)

1. Chlen-korrespondent Akademii nauk SSSR.
(Railroads)

PETROV, A.P., professor.

Railroads of India and their operation. Zhel.dor.transp.39 no.1:
75-82 Ja '57. (MLRA 10:2)

(India--Railroads)

PETROV, A.P., professor.

Railroads of India and their operation. Zhel dor.transp.39 no.2:50-
88 P '57. (India--Railroads) (MLRA 10:3)

PETROV, A.P., professor, doktor tekhnicheskikh nauk.

Ways of improving the plan for making up trains. Zhel.dor.transp.

1) no. 9 1959 Ag. (MIRA 1959)

(2) no. 10 1959 Ag. (MIRA 1959)

PETROV, A.P.; PRIPOL'TSEV, V.A.; SHUL'GA, V.Ya.; FRIDMAN, M.I., otv. za
vypusk; BOBROVA, Ye.N., tekhn.red.

[Railroads of India] Zheleznye dorogi Indii. Moskva, 1958. 65 p.
(Informatsiia o zarubeshnoi tekhnike, no.5) (MIRA 12:6)

1. Delegaty IV sessii Podkomiteta po zheleznodorozhnomu transportu
Ekonomicheskoy komissii dlya stran Azii i Dal'nego Vostoka (for
Petrov, Pripol'tsev, Shul'ga).
(India--Railroads)

10(7) SOV 70-10034, 18

AUTHOR: Polov, N. P., Candidate of Technical Sciences, Institute of Electrical Engineering, USSR Academy of Sciences, Moscow, USSR

TITLE: Soviet Scientists' Development of the Electric Drive of the Ship

PERIODICAL: Vestnik Akademii Nauk SSSR, 1970, No. 11, pp. 1111-1118, USSR

ABSTRACT: This article describes the development of the electric drive of the ship in the USSR. The Soviet Academy of Sciences has been conducting research in this field since 1950. The results of this research are presented in the article. The author discusses the advantages of electric drive and the problems of its development. He also describes the development of the electric drive of the ship in the USSR and the results of the research conducted in this field. The author also discusses the advantages of electric drive and the problems of its development. He also describes the development of the electric drive of the ship in the USSR and the results of the research conducted in this field.

There are 3 figures.

Doc 1,1

PETROV, A.P., prof.

Railroad transportation at the World Fair. Vest. TSNII MPS 17
no.8:56-58 D '58. (MIRA 12:1)
(Brussels--Railroads)

SISYAKYAN, N.M.; FRANK, G.M.; SHCHERBAKOV, D.I., akademik; SIDORENKO, A.V.;
ARTOBOLEVSKIY, I.I., akademik; IL'IN, V.A., doktor tekhn. nauk;
DOMANITSKIY, S.M., kand. tekhn. nauk; PETROV, A.P.; BUDNIKOV, P.P.

Soviet scientists on the exhibition. Vest. AN SSSR 28 no.11:100-118
N 158. (MIRA 11:12)

1.Chlen-korrespondent AN SSSR. (for Sisyakyan, Siderenko, Petrov,
Budnikov). 2.Chlen-korrespondent AMN SSSR (for Frank).
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~~_____~~ Railroads of Japan. Zhel. dor. transp. 40 no.1:82-89 JA 188.

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Using electronic calculating machines in railroad transportation.
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[Cybernetics and the automation of transportation] Kibernetika i
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PETROV, A.P., prof.

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dor.transp. 42 no.7:26-33 J1 '60. (MIRA 13:7)

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transp. 42 no.8:41-45 Apr '60. (MIRA 13:8)

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VIRNICHENKO, A.V., ass.; BURHO, F.B., ass.; BEVCOV, A.V.,
dots.; TULPOV, L.I., dots.; SUD'ZENKO, P.A., ass.;
YADLENKO, V.Ye., ass.; Irinimal uchastiyq PETROV, A.I.,
prof.; VEDEVKINA, L.M., red.; SLEPCHAYA, I.Ye., tekhn.
red.

[Traffic organization in railroad transportation]Organiza-
tsiia dvizheniia na zheleznodorozhnom transporte; konspekt
leksii. Pod obshchei red. I.G.Tikhomirova. Minsk, Izd-
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Experiment in traffic control in a railroad section with the aid
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56 '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo
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(Railroad—Traffic)

(Electronic calculating machines—Programming)

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Vest. TSNIIMPS 20 no.6:10-17 '61. (MIRA 14:10)

1. Chlen-korrespondent AN SSSR.
(Railroads--Automatic train control)
(Railroads--Communication systems)

FETROV, A.P., prof., doktor tekhn.nauk; PUSTOVOYTOV, L.F., kand.tekhn.nauk

Present-day state of automation, remote control and mechanization
in railroad transportation and ways of expanding their application.
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(Remote control)

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[Use of electronic digital computers in compiling train sheets] Sostavlenie grafika dvizheniya poezdov na elektronnykh tsifrovyykh vychislitel'nykh mashinakh. Moskva, Transzheldorizdat, 1962. 199 p. (MIRA 15:9)

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Methods of solving some problems in transportation by electronic computers. *Železnice Jug 19* no.5:10-23 My'63.

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SECRET

Methods for solving certain transport problems
by means of electronic computers

[011 11 A 656 1]

**Methods for solving certain transport problems
by means of electronic computers,**

by Prof. Dr. A. P. Petrov, Moscow

SUMMARY

report submitted for the 18th Session of the Intl. Railway Congress
Association, Munich, Germany, 17-27 June 1962.

publ. in Monthly Bulletin of the Intl. Railway Congress Association, Brussels, Jun '62.

PETROV, A.P., prof.

In the calculation center of French railroads. Vest. DNI MPS
21 no. 3.58-63 '62. (MIRA 1: 5
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Train traffic organization on French railroads. Zvezd. dor. transp.
44 no.6:86-93 Je '62. (MIRA 1:8)

1. Chlen-korrespondent AN SSSR.
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The System of Railway Calculating Centres with Remote Transmission of Data.

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Effect of transpiration on the change in the size (growth) of corn leaves. Nauch. zap. vyssh. shkoly, sibir. nauki no.1:19-24 1964.
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1. Rekomendovana kafedroy botaniki Kazanskogo pedagogicheskogo instituta.

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in the U.S.S.R., held at Moscow. Vest. AN SSSR 33 no.7:116-118
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PETROV, A.P., doktor tekhn. nauk, prof.; TULUPOV, L.P., kand. tekhn. nauk; KRYUKOV, N.D., kand. tekhn. nauk; GUNDOBIN, V.N., inzh.; VASIL'YEV, G.S., kand. tekhn. nauk, GRISHIN, P.S., kand. tekhn. nauk; MORZVA, K.N., inzh.; KZE, V.A., inzh.; LEVCHIN, G.L., inzh.; BERNGARD, K.A., doktor tekhn. nauk, prof.; BIKHENTAY, M.A., inzh.; B'YANOV, V.A., inzh.; ILOVAYSKIY, N.D., inzh.; MUKHAMED V. G.A., kand. tekhn. nauk; MIRA SHNICHENKO, A.F., inzh.; ANDRIANOV, V.P., inzh.; BUTS, V.I., inzh.; KALIMOV, A.A., inzh.; KIREYEV, D.P., inzh.; DYUFUK, S.L., kand. tekhn. nauk; USTINSKIY, A.A., kand. tekhn. nauk; MIKHAYLOV, S.M., inzh.; NESTEROV, Ye.P., kand. tekhn. nauk, retsenzent; LIVSHITS, V.N., inzh., retsenzent; PREDE, V.Yu., inzh., red.; VOROTNIKOVA, L.P., tekhn. red.

[Control of transportation processes using electronic digital computers] Upravlenie perevozhnym protsessom s primeneniem elektronnykh tsifrovyykh vychislitel'nykh mashin. Pod obshchei red. A.P.Petrova. Moskva, Transzheldorizdat, 1963. 207 p. (MIRA 16:8)

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(Railroads--Management. (Electronic digital computers))

ZAGLYADIMOV, Dmitriy Petrovich; PETROV, Aleksandr Petrovich;
SEVGEYEV, Yevgeniy Stepanovich; AKHRAMOVICH, L.K.,
retsenzent; VARGIN, S.N., retsenzent; YERZAKOV, A.A.,
retsenzent; KOZAK, V.A., retsenzent; MOZOLEVSKIY,
I.V., retsenzent; PERSHIN, B.F., retsenzent; PIVENSHEYN,
D.I., retsenzent; POKORNYEV, A.I., retsenzent; SRETANIN,
A.I., retsenzent; SHESTAKOV, A.I., retsenzent; RYSHK,
L.S., red.

[Organization of traffic in allroad transportation] orga-
nizatsia dvizhenia na zheleznodorozhnom transporte.
Izd.4. Moskva, Transport, 1964. 542 s. (MIRA SP:1)

L 28063-66 JT

ACC NR: AP6005547

(A)

SOURCE CODE: UR/0030/66/000/001/0030/003

AUTHOR: Petrov, A. P. (Corresponding member AN SSSR)

ORG: none

TITLE: Use of electronic computers for transportation problems

SOURCE: AN SSSR. Vestnik, no. 1, 1966, 30-35

TOPIC TAGS: computer, digital computer, transportation

ABSTRACT: General remarks are made on the subject of current and prospective uses of computers in transportation systems. The computer solving of organizational problems, such as traction calculations, train schedule compilation, locomotive and crew turnover, rr car distribution, etc., has received more attention in the SSSR than the computer solving of statistical and accounting problems. Computers have helped in calculating optimum speed and running time of trains, fuel and electric-energy consumption, etc. "However, most problem solutions obtained by computers have been little used so far." The Transportation Ministries are planning to organize computing centers with remote data transmissions. Two directions are recommended

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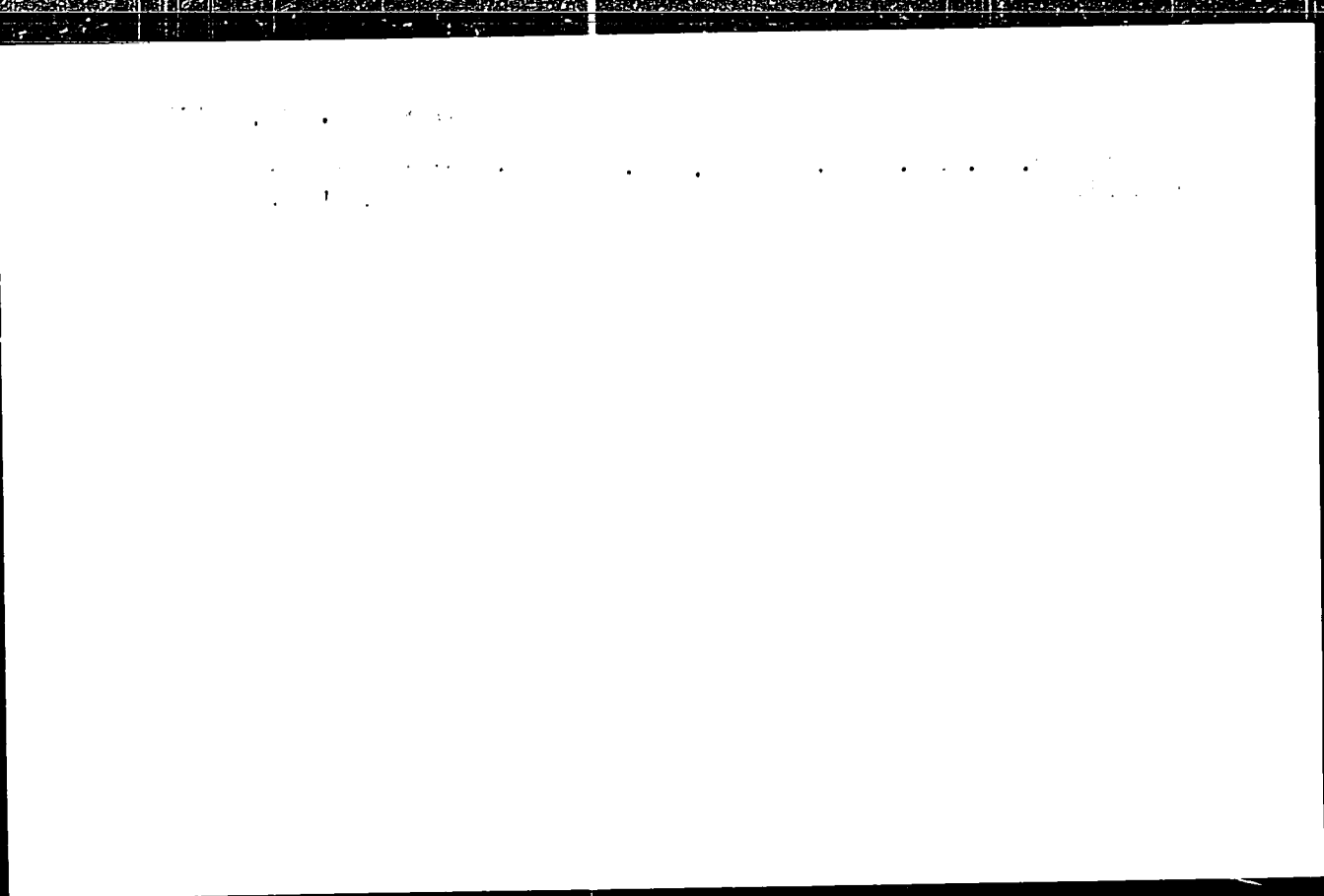
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ACC NR: AP6005547

for the work of the Permanent Commission on Scientific Problems in Developing Transportation, AN SSSR: (1) Computer solving of typical automatic control and accounting problems and (2) Development of principles, methods, and systems of automation using computers. Prerequisites for successful work along the first direction are specified. The importance of contiguous and related problems, such as reliability of data transmission and training of required specialists, is noted. Orig. art. has: no figures, formulas, or tables.

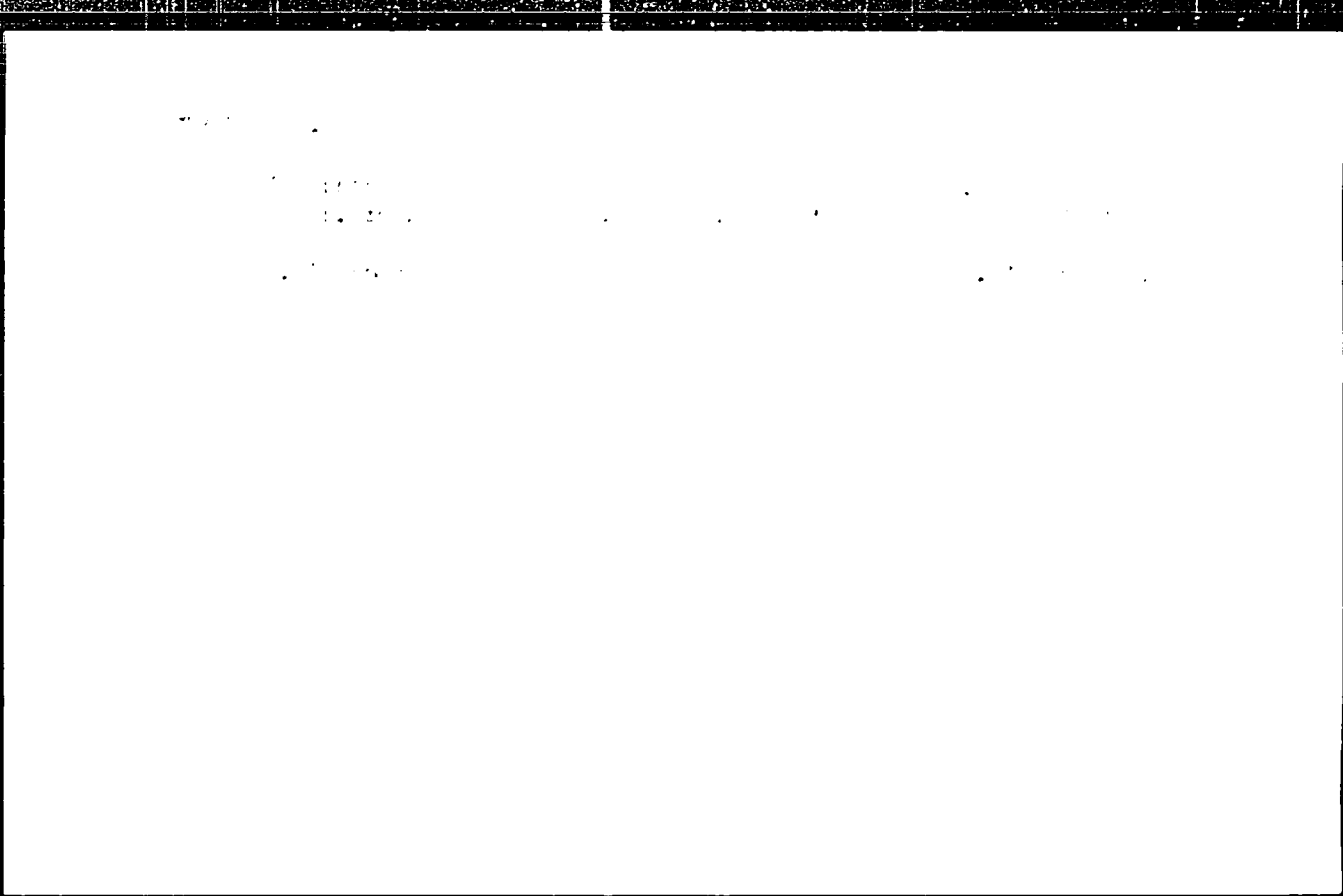
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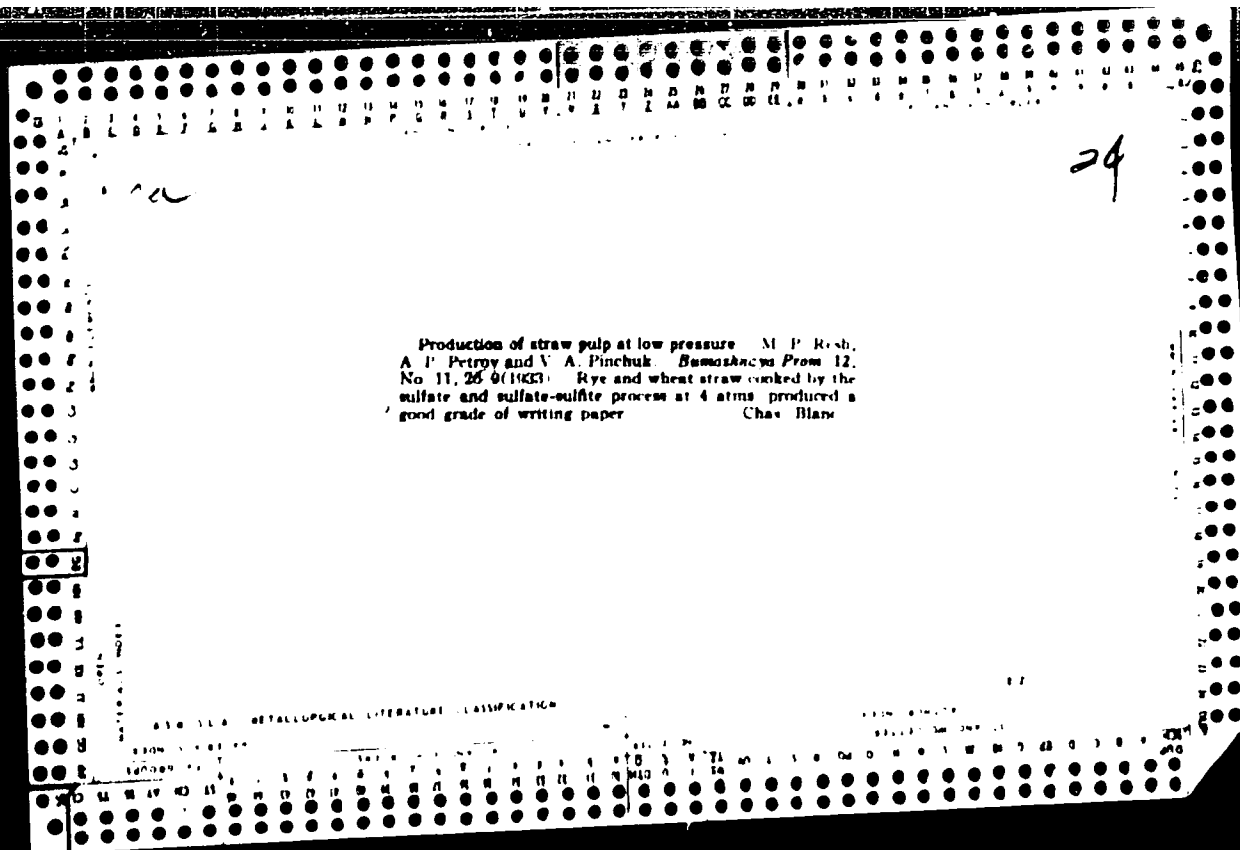
PEROV, A.M.; KULIK, S.S., nauchn. red.

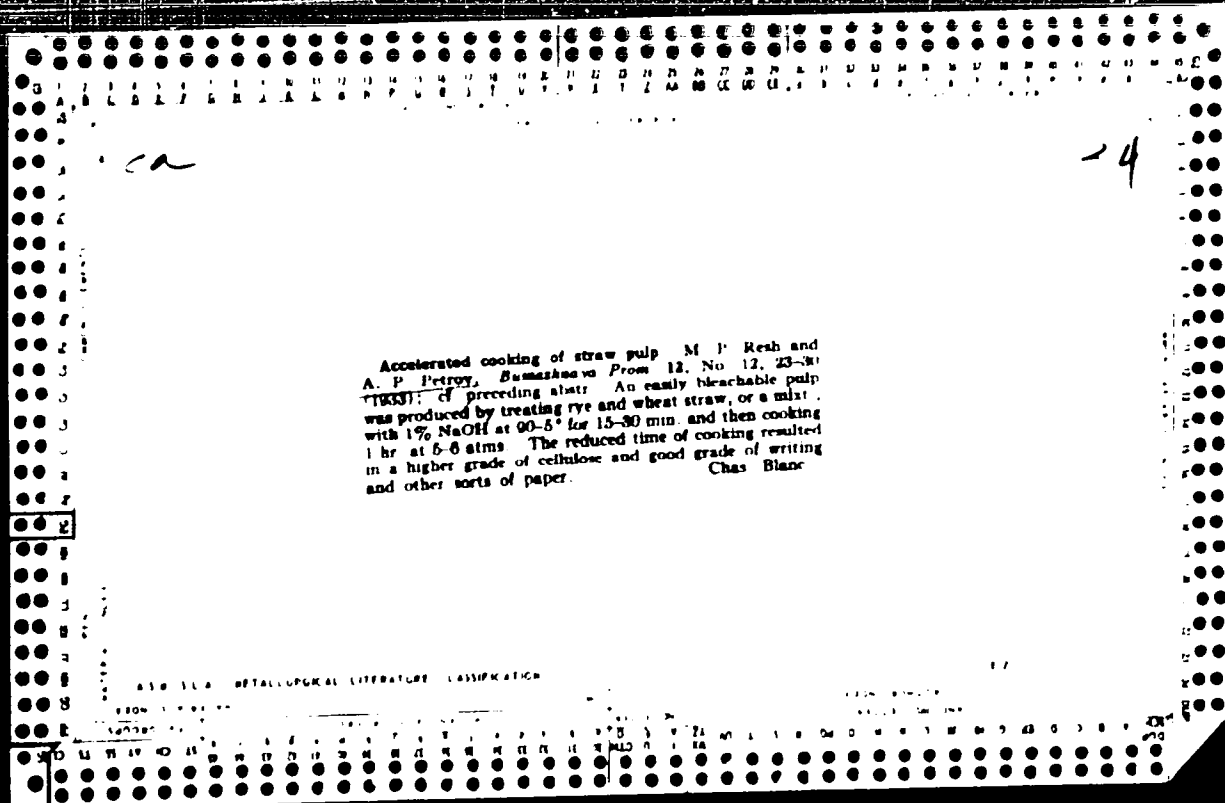
[Difficulties in printing paper and methods for their
elimination.] Zatrudnenia s prokleikoi bumagi i spo-
soby ikh ustraneniia. Moskva, TSentr. nauchno-issl.
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i lesnomu khoz., 1963. 101 p. (MIRA 17:10)



AKULINICHEV, I.T.; ANDREYEV, L.I.; BAYEVSKIY, S.M.; BAKOV, A.Ye.; BUILOV, I.G.
GAZINKO, O.G.; GONCHAR, S.G.; ZAZKIN, K.P.; KLEINETS, Y.F.;
MAKSIMOV, S.V.; MELNIKOV, Y.I.; MOZAKOV, A.V.; PETROV, A.P.;
RYABCHENKOV, A.D.; SAZONOV, N.I.; STEYANOVICH, R.I.; PETROVA, V.I.;
KHILKIVICH, B.G.; SALIMOV, I.O.; SUYARLINA, S.M.; USANOV,
N.G.; YAZOVSKIY, V.I.

Method and means of medical and biological studies in a space
flight. Probl. kosm. biol. 3:3-11, 1968. (USSR) (1968)



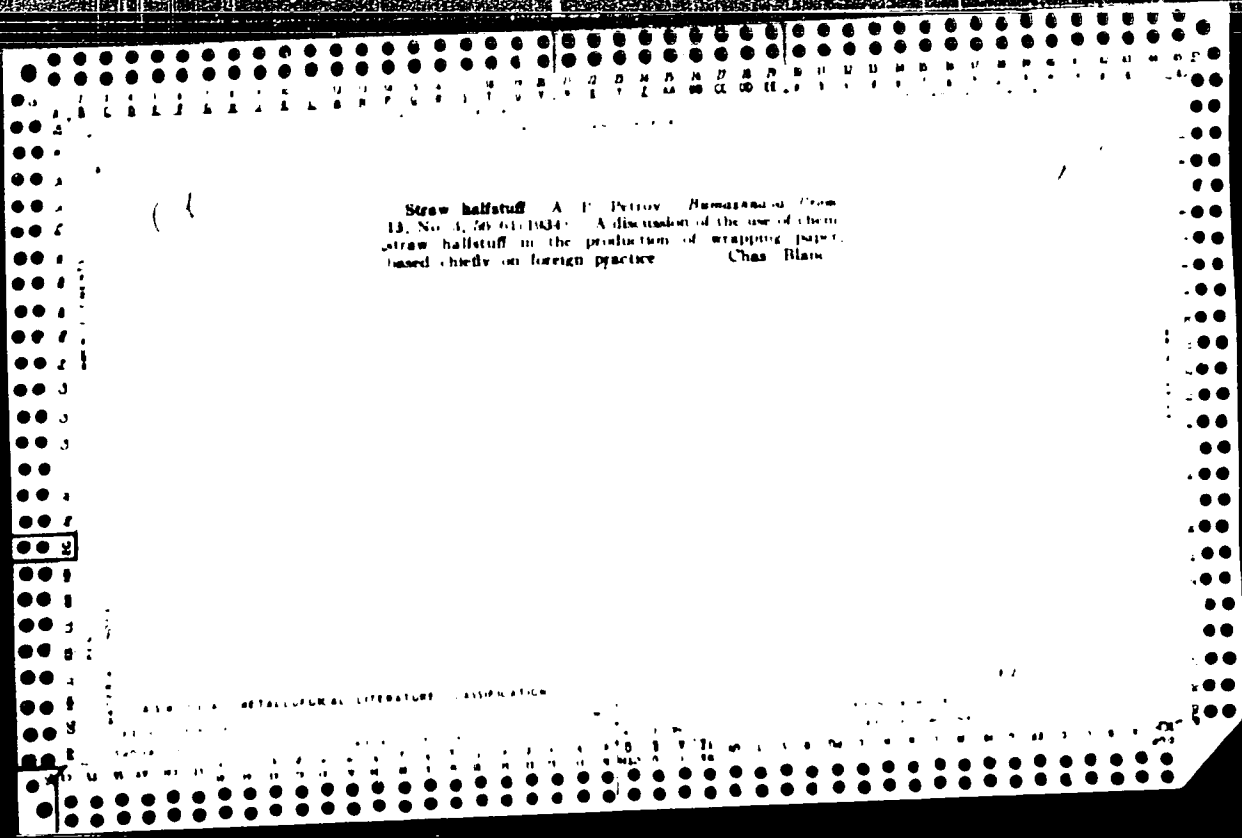


Two-stage method of straw pulping. A. P. Petrov, *Central Nauch.-Issledovatel. Inst. Khimichesk. Prom. Mater. (Central Sci. Research Inst. Paper Ind. Trans.)* 1934, No. 1, 111-47; of *Lening. Ind. 1932*, No. 2037, 16-42; 1933, No. 130, 43-50; *Russk. Inzh. (28, 045)*

The results are given of lab. and factory tests of 2-stage pulping of rice straw by preliminary maceration and subsequent steaming of the mass freed from the excess of alkali liquor. With increased temp. during maceration the softness of finished pulp is increased, the best results being obtained by maceration for 2 hrs. at 60° and for 1 hr. at 80°. Optimum conditions of cooking straw (a-hr. at 80°) are, resp., 2, 1.5 and 1 hr. at 6 atm. pressure. The extn. is made with 7 parts (on air-dry straw) of 2.5% soln. of active alkali (fresh NaOH or NaOH + Na₂S or caustic recovered melt). The consumption of alkali in extn. is about 20% of air-dry straw. About 60-70% of liquor is removed after the extn., using about 35% of liquor. The spent liquors can be repeatedly used (about 8 times) with the addn. of some fresh stock. The mean yield of extd. straw is 64-76%, depending on

the conditions of maceration, and that of cooked and bleached pulp 44% of shredded air-dry straw. The productivity of cooking units is increased 120%, the danger of overcooking is reduced and the resulting pulp is of uniform good quality, suitable for production of high grade writing and printing paper. Pulping with NaOH + Na₂S is more active than with NaOH, producing a smaller yield of paper pulp (less lignin content). The consumption of alkali is equal to that of the common pulping. Circulation of alkali liquors in the process of maceration is advisable for maintaining a uniform temp. Substitution of steaming for cooking in the absence of sufficient vol. of cooking liquor leads to excessive undercooking. Water washing of extd. straw is not absolutely necessary and is a cause of difficulties in the recovery of alkali liquor. The use of PhOH by-product suits in the multistage pulping is not practicable. Chas. Blane

ASB 31.4 METALLURGICAL LITERATURE CLASSIFICATION



Use of resin paraffin size at the mill. Gerol Trade
A. P. Petrov. *Metallurgiya* 18, No. 12, 1961, 103
1040. Satisfactory results are reported in sizing of
various grades of paper with a size based on resin and
20% paraffin by emulsification with hot steam at 0.4 atm.
pressure. The resulting papers show good mesh properties
and compactness, with a 25% economy in the use of resin
and alumina. Resin paraffin sizing at the Kamenskoi
paper mill. G. G. Gatrishchak. *Metallurgiya* 1961, 103
results are reported.

12

Colophony glue with a high content of free resin. A. P. Petrov and E. M. Berkman. *Bumashnyy Prom.* 10, No. 1, 33-9 (1941). Expts. were made in lab. and plant to develop a colophony glue of a high content of ~~free resin~~ by use of protective colloids. The compn. was approx. water 150 l and calcined soda 3.4, bicarbonate 2.7, rosin 200 kg and NH₄ (22%) 4.4 l. The amt. of colloid was 2.5% by wt. of rosin. The mixt. was heated for 1.6 hrs. at 85-90°. Casein was the most effective colloid. Suspensions contg. 5-5.5% casein were most stable. The new glue retains the filler on paper better than does ordinary white glue (low content of resin). Details of production are given. B. Z. Kamuh.

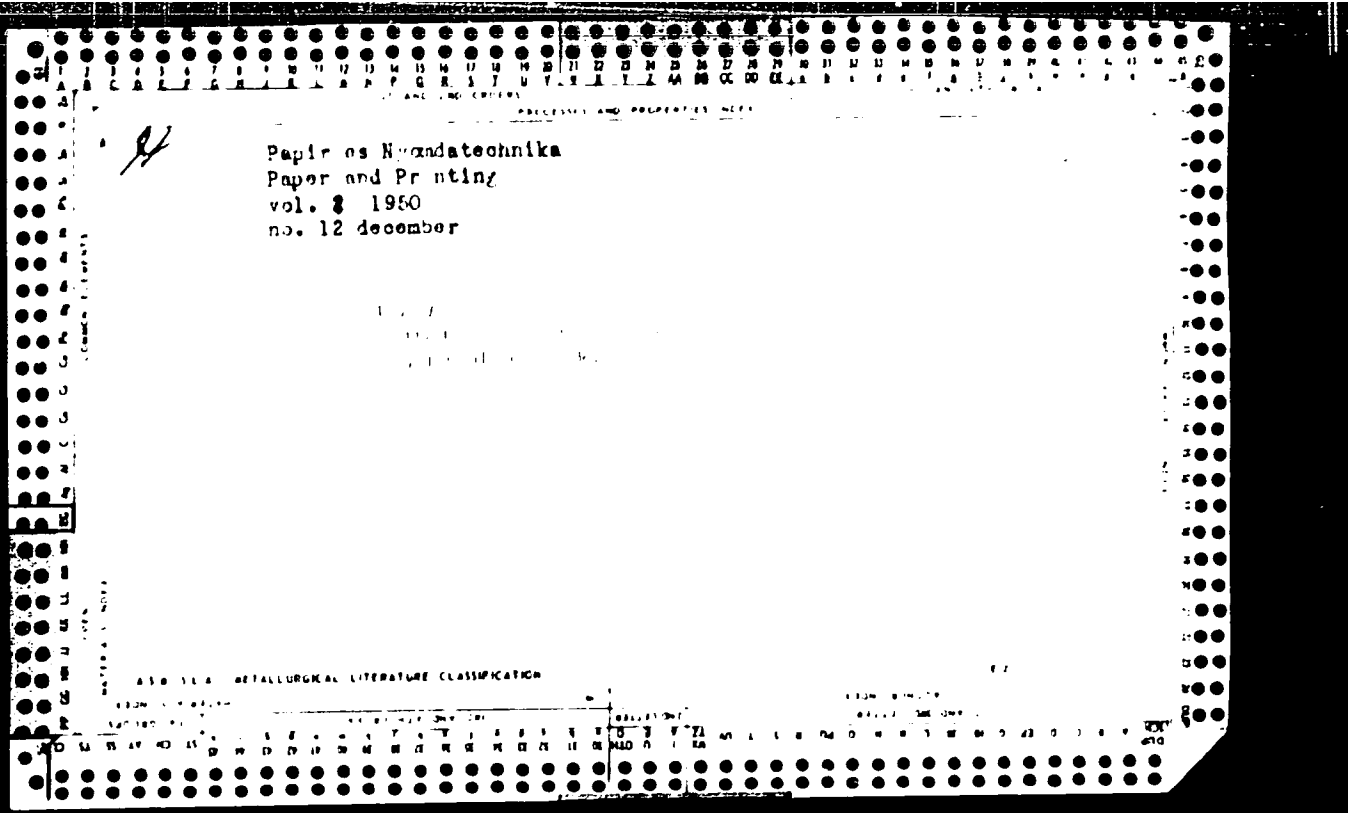
BERKMAN, E.M.; PETROV, A.P.

Frost-resistant, concentrated rosin adhesive. Patent U.S.S.R. 77,916, Dec.
31, 1949.

(CA 47 no.20:10870 '53)

CA

The desizing of paper. A. P. Petrov. *Bumazh. Prom.*
24, No. 5, 10 (1949). The causes of desizing of paper
after manual are listed as sunlight, alkalis, discharges, and
certain chemicals. The behavior of the degree of sizing of
paper vs. time is summarized. A drop of perhaps 40% in
sizing value occurs in 1-3 days and then the degree of
sizing rises slowly until, after 75 days, the initial value
has been regained. The recovery in sizing increases with
the amt. of alum used in the beater. M. S.



Petrov, A.P.

The importance of the adsorptive properties of pulps in the sizing of paper. A. P. Petrov. *Bumazh. Prom.* 29, No. 6, 11-14 (1964). — *Summary with references on the relation between the sizing characteristics of various types of pulps and a no. of pulp properties.* J. L. Kazy

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Effect of the temperature of water on paper sizing. Bum.prom.31
(MLRA 10:2)
no.12:9-11 D '56.

1. Tsentral'nyy nauchno-issledovatel'skiy institut tsellyuloznoy i
bumazhnoy promyshlennosti.
(Sizing (Paper))