Power Transmission by Direct and Alternating (Cont.)   SOV/1386

Berlin, Ye.M. Current Regulator for E-V D-C Transmission Lines   201
    A current regulator, developed by Tekhbyuro MES and installed in the
    Kashira-Moscow d-c line, proved to be too complicated and not sufficiently
    reliable because of the great number of tubes required (about 20). An-
    other type of current regulator (a contactless type developed in 1944
    by Professors I.L. Kaganov and A.A. Sakovich) also was found unsuitable
    due to its lag and narrow zone of regulation (50°-60°). The author was
    commissioned to design a "tubeless" current regulator, which he completed
    in 1952. Experimental investigations on it proved that the previous dis-
    advantages were removed. There are 5 diagrams and 3 Soviet references.

Melik-Sarkisov, B.S. Investigation of Shunting Devices for D-C Transmission
Lines   210
    Investigations were carried out by NIIPT in the Kashira-Moscow transmis-
    sion line on the use of shunting devices during repair of mercury rectifiers,
    and without interruption of electric transmission. Shunt rectifiers
    and shunt disconnectors were tested and approved for use in the Stalin-
    grad-Donbass system. There are eleven diagrams and no references.

Card 9/13

Power Transmission by Direct and Alternating (Cont.)   SOV/1386

Shekhtman, M.G. Electromagnetic Power of a Synchronous Machine
Operating With a Rectifier as a Load   225
     The author explains the theory of synchronous machines operating at
     full power against mercury rectifiers, and discusses the conditions of
     operation of synchronous machines from the point of view of their electro-
     magnetic power. There are two diagrams and no references.

Shipulina, N.A. Bridge System With Capacitors Connected in Series To
Circuit Windings of the Transformer   234
     The author explains the theory and discusses the results of experi-
     mental investigation on the above problem. There are 12 diagrams and
     no references.

Mel'gunov, N.M. Basic Features of a System With Bridge Converters
Connected Through Capacitors in D-C Transmission Lines   255
     The author explains the theory and practical application of this
     system, which consists in the possibility of connecting bridge converters
     to an a-c network not through transformers, as is usually done, but
     through a bank of capacitors (N.M. Mel'gunov holds author's certificate
     No.105207, 1952, on this method). There is 1 appendix, 16 oscillograms
     and 5 Soviet references.

Card 10/13

Power Transmission by Direct and Alternating (Cont.)   SOV/1386

Kuchinskiy, G.S.   The Possibility of Using Cable Paper in the Manufacture of Power
Capacitors For D-C Transmission Lines   282
    The author describes a method of reducing the cost of capacitor batteries
    operating in ripple voltage circuits by using cable paper in their manufac-
    ture. Cable paper costs 10 times less than conventional capacitor paper
    but its electric strength also is less and therefore its thickness must be
    greater. In determining the cost of Kva capacitors the author draws on
    the experience of the high-voltage laboratory of LPI (Leningradskiy poli-
    tekhnicheskiy institut) where cable-paper capacitors for d-c and ripple
    voltages have been produced on a semi-industrial scale since 1938. The
    technical editor suggests that plants manufacturing capacitors consider
    the author's results when producing capacitors for the above-mentioned
    conditions. He notes, however, that the cost relationships advanced by
    the author cannot yet be considered justified owing to the lack of operating
    experience which would indicate a long service life of cable-paper capacitors
    in comparison with conventional capacitors. In his comparisons the
    author used 35-40 Kv/mm as the working voltage density. There are 2
    diagrams and 4 Soviet references.

Card 11/13

Power Transmission by Direct and Alternating (Cont.)   SOV/1386

Kraychik, Yu.S. and A.M. Pintsov. Electrical Parameters of D-C Transmission
Lines With Single-core Metal-sheathed Cables   289
   The author obtains design parameters and equivalent circuits of d-c
   transmission lines consisting of single-core cable with a viscous saturant
   and lead or aluminum sheathing. There are 6 diagrams and 3 Soviet ref-
   erences.

SECTION II. ALTERNATING CURRENT

Koshcheyev, L.A. and Yu.A. Rozovskiy. Static Stability of Long-distance
Electric Transmission Lines With Auxiliary Synchronous Condensers   299
   NIIPT has carried out an investigation on comparative stability of long
   distance transmission lines with and without synchronous condensers. The
   investigations were carried out in the Stalingrad GES - Moscow line.
   The authors describe the tests and their results. They mention experi-
   mental work done by A.I. Kazachkov, V.A. Anreyuk, A.P. Zhilin and A.V.
   Burmistrov. I.A. Kosov and Ye.F. Arzamastsev participated in develop-
   ing the stability comparison model. There are 7 diagrams and 7 ref-
   erences, all Soviet.

Card 12/13

SENA, L.A.; PANOV, I.P.; FRIDLYAND, R.M.

Study of the quenching of the pilot arc of a high-voltage mercury-arc rectifier. Izv. NIIPT no.1:39-59 '57.   (MIRA 18:9)

PANOV, IU.

Electronics in the control apparatus of the production processes. p.29.
(RADIO I TELEVIZIIA, Vol. 6, no. 2, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

PANOV, I.V.; ANTONINOV, V.N.; SOKOLOV, D.D.; ZAGUMENNYY, V.V.;
CHEREPNIN, S.V.; OBYDENNYY, P.T.; KOROBOV, A.S., red.;
KOMONOV, A.S., red. izd-va; KHENOKH, F.M., tekhn. red.

[Provisional technical specifications for planning landscaping
operations]Vremennye tekhnicheskie usloviia na proektirovanie
rabot po ozeleneniiu. Utverzhdeny prikazom po Ministerstvu
kommunal'nogo khoziaistva RSFSR No.233 ot 20 oktiabria 1961.
Izd-vo M-va kommun.khoz.RSFSR, 1962. 147 p.   (MIRA 15:8)

1. Gosudarstvennyy institut po proyektirovaniyu kommunal'nogo
stroitel'stva.
                    (Landscape gardening)

GETSOVA, I. N.; PANOV, I. V.; BEDNYAGINA, N. P.

Benzazole and napthazole series. Part 6: 2-cycloalkylaminonapth [1,2-d]imidazoles and their 1-and 3-alkyl substituted derivatives. Zhur. ob. Khim, 34 no.6:2026-2029 Je '64.   (MIRA 17:7)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

BEDNYAGINA, N.P.; TYURENKOVA, G.N.; PANOV, I.V.

Benz-and naphthazole series. Part 5: 5,6-dimethyl-2-
hydrazinobenzimidazole and its N-alkyl-substituted derivativ .
Zhur. ob. khim. 34 no. 5:1575-1577 My '64.   (MIRA 17:7)

1. Ural'skiy politekhnichesiiy institut imeni Kirova.

PANOV, I.V.

Experimenting with bacterial fertilizers. Zemledelie 4 no.12:
85-86 D '56.   (MLRA 10:2)

1. Inspektor Goskomissii po sortoispytaniyu sel'skokhozyaystvennykh
kul'tur po Dnepropetrovskoy oblasti.
          (Fertilizers and manures)

PANOV, I.V., BEDNYAGINA, N.P.

Structure and pharmacological activity of 2-hydrazine balzazoles [with summary in English]. Farm. i toks. 20 no.6:25-27 N-D '57
(MIRA 11:6)

1. Kafedra farmakologii (zav. - prof. A.K. Sangaylo) Sverdlovskogo gosudarstvennogo meditsinskogo instituta i kafedra organicheskoy khimii (zav. - prof. I.Ya. Postovskiy) Ural'skogo politekhnicheskogo instituta imeni S.M. Kirova.
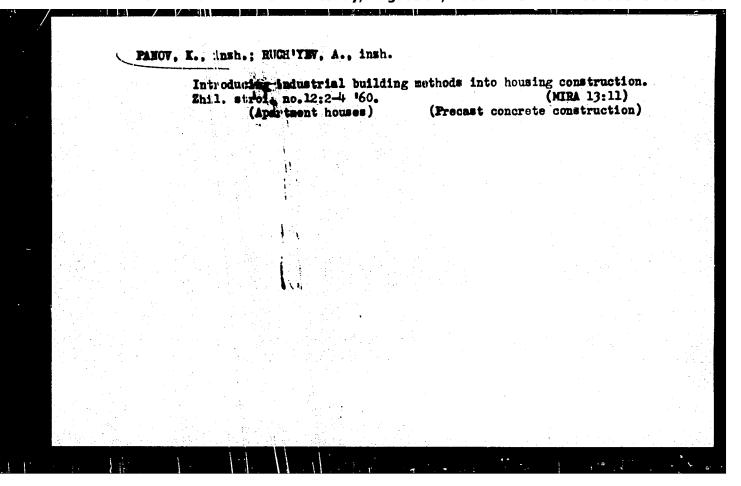(HYDRAZINE, rel. cpds.
2-hydrazine benzazoles, structure & pharmacol (Rus))
(HETEROCYCLIC COMPOUNDS,
same)

KHADZHIOLOV, Khr.; DOCHOVSKI, D.N.; PANOV, Iv.; BABADZHOV, L.

Distribution, evolution and forms of silicosis in the
"Chiprovtsi" mine. Nauch tr. vissh. med. inst. Sofiia 42
no.2:93-111 '63.

1. Predstavena ot prof. L. Tsvetkov, rukovoditel na Katedrata
po khigiena s klinika po profesionalni bolesti.
            (SILICOSIS)   (EPIDEMIOLOGY)

PANOV, K., Insh.; RUGH'YEV, A., insh.

Introducing industrial building methods into housing construction.
Zhil. stroi. no.12:2-4 '60.   (MIRA 13:11)
          (Apartment houses)   (Precast concrete construction)

DUBRAVIN, G.B., red.; PANOV, K.S., red.; STARUKHIN, N.M., red.;
        PETROVA, V.V., red.izd-va; NAUMOVA, G.D., tekhn.red.

        [Construction specifications and regulations] Stroitel'-
        nye normy i pravila. Moskva, Gosstroiizdat. Pt.3. Sec.K.
        ch.1.[Apartment and public complexes, buildings, and
        structures; regulations for construction organization and
        acceptance] Zhilye i obshchestvennye kompleksy, zdaniia i
        sooruzheniia; pravila organizatsii stroitel'stva i priemki
        v ekspluatatsiiu (SNiP III-K. 1-62). 1963. 11 p.
                                            (MIRA 17:1)
        1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
        stroitel'stva. 2. Gosstroy SSSR (for Dubravin). 3. Mezhve-
        domstvennaya komissiya po peresmotru Stroitel'nykh norm i
        pravil (for Panov). 4. Nauchno-issledovatel'skiy institut
        organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroi-
        tel'stvu Akademii stroitel'stva i arkhitektury SSSR (for
        Starukhin).

PANOV, K.V.

Public inspection of technical progress. Tekst. prom. 25 no.12:
85-87 D '65.   (MIRA 19:1)

1. Predsedatel' Soveta Nauchno-tekhnicheskogo obshchestva Moskov-
skoy kruzhevnoy gardinno-tyulevoy fabriki imeni Tel'mana.

PANOV,K.V.

Operation and periodic repair of equipment in chemical plants. Khim
prom. no.6:174-176 Je '47.   (MIRA 8:12)

1. Glavnyy mekhanik Ministerstva khimicheskoy promyshlennosti SSSR.
                        (Chemical plants)

KOVRIZHIN, A.K.; LYKOV, G.P.; PANOV, L.K.

Investigating the manifestation of rock pressure in the chamber and pillar system of mining. Vop. gor. davl. no.17:13-18 '63.

(MIRA 18:9)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut.

S/124/62/000/005/014/048
D251/D308

AUTHOR: Panov, L.

TITLE: Method of investigating the potential flow of an in-
               compressible fluid around a wing profile of arbitrary
               form

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 29,
               abstract 4B149 (Godishnik Mash. - elektrotekhn. in-t,
               1959 (1960) v. 6, no. 4, 191 - 211)

TEXT: By using the results obtained by Kantorovich (L.V. Kantoro-
vich, V.I. Krylov, Priblizhennyye metody vysshego analiza, (Appro-
ximate Methods of Higher Analysis), M.,-L. Gostekhizdat, 1952, Ed.
4, 446 - 462) the author gives a method of successive approximations
for obtaining the function which effects the conformal transforma-
tion of the contour under investigation onto the unit circle. Examp-
les of the calculation are given. 5 references. [Abstractor's note:
Complete translation].

Card 1/1

S/124/62/000/005/013/048
D251/D308

AUTHOR: Panov, L.

TITLE: The potential flow of an incompressible fluid around a
             wing profile of limited thickness and curvature

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 29,
             abstract 5B248 (Godishnik Mash.- elektrotekhn. in-t.
             1959 (1960), v. 6, no. 4, 223 - 225)

TEXT: The possibilities are considered of simplifying the method
expounded by the author (Godishnik Mash. - elektrotekhn. in-t, 1959
(1960) v. 6, no. 4, 191-211) for a curved profile with limited
thickness and curvature. Examples of the calculation are given for
two forms of the wing profile. 3 references. [Abstractor's note:
Complete translation].

Card 1/1

S/124/62/000/005/023/048
D251/D308

AUTHOR: Panov, L.

TITLE: The flow of an ideal incompressible fluid around two
              parallel infinite circular cylinders

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 51,
              abstract 5B318 (Godishnik Mash. - elektrotekhn. in-t.
              1959 (1960), v. 6, no. 4, 213 - 222)

TEXT: The problem is considered of the flow around two identical
infinite circular cylinders of an ideal incompressible liquid. It
is shown that this problem may be considerably simplified with the
help of the simple conformal transformation considered in a previ-
ously published work. In the transformed plane the method of Kanto-
rovich may be applied to effect a conformal reflection with the aid
of which the problem may be completely solved. The proposed method
is especially useful in the case when the distance between the axes
is greater than twice the diameter of the cross-section of the cy-
linder. [Abstractor's note: Complete translation].

Card 1/1.

PANOV, L. YA.

Applying the hodograph method for the study of the potential
flow of an ideal incompressible fluid in a plane diffuser.
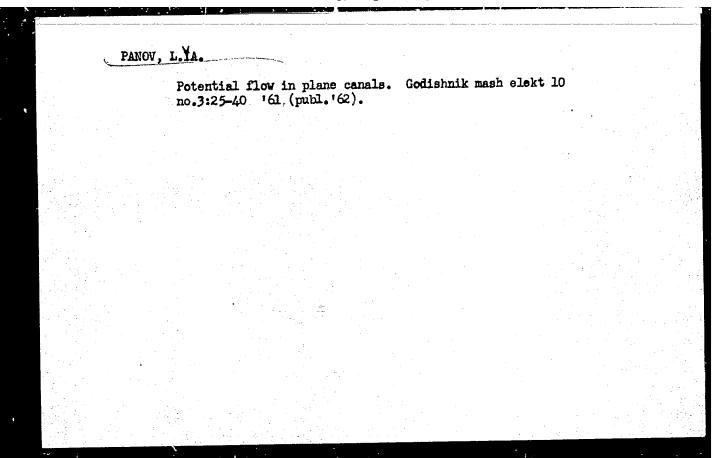Godishnik mat elekt 8:73-86 '60. (publ. '61).

PANOV, L.A.

Potential flow of the incompressible fluid in a plane diffuser.
Godishnik mash elekt 9 no.3:61-70 '61. (publ. '62)

PANOV, L.IA.

Construction of a plane symmetrical channel by a given speed
distribution. Godishnik mash elekt 9 no.3:71-82 '61.
(publ. '62)

PANOV, L.YA.

Extending applicability of a method for the study of the potential
flow around the wing profile of an arbitrary form. Godishnik
mash elekt 9 no.3:83-94 '61. (publ. '62)

PANOV, L.YA.

Potential flow in plane canals. Godishnik mash elekt 10
no.3:25-40 '61 (publ.'62).

-PANOV, L.YA.

Construction of symmetrical wing profiles after a given speed distribution. Godishnik mash elekt 10 no.3:51-64 '61 (publ.'62).

PANOV, L. Ya

    Dimensionii   the plane radial blade wheel for hydraulic turbo-
machines. Godishnik mash elekt 11 no.3:73-84 '62 [publ. '63]

PANOV, L. YA.

Potential flow in flat symmetrical canals. Godishnik mash elekt 12 no. 3:83-95 '62 [publ. '63].

22

/ 10.1200   1327 1502 2607

AUTHOR: Panov, Lyuben

TITLE: On a new method for the determination of the potential flow
of an incompressible fluid

TEXT: Under the assumption that the fluid is ideal and incompressible,
the author describes a new method for the construction of the potential
flow for a great class of aviation profiles. Starting from two functions
being inverse to the complex potential

$$z_1 = g_1(w) ; \quad z_2 = g_2(w) \tag{1}$$

for known profiles flown towards by a flow free of circulations, the
author constructs a new flow which is determined by the composed function

$$z(w) = z\left[g_1(w), g_2(w)\right] . \tag{2}$$

Card 1/3

29849
S/044/61/000/007/018/055
On a new method for the determination ...   C111/C222

In the region of motion the function $z(w)$ must be unique and must satisfy
the condition $\left.\dfrac{dz}{dw}\right|_{w=\infty} = 1$. The case where the equation (2) has the form

$$z(w) = \left[g_1^m(w) \cdot g_2^n(w) \right]^{1/p} \, , \qquad\qquad (3)$$

where m, n, p are positive integers and $m + n = p$ is considered in detail.
As an example the author constructs a group of monosymmetric contours the
geometrical contours are so that they can be counted to the group of
carrying profiles. The equations of these contours are given explicitly;
a formula for the determination of the velocity along the surface of the
investigated profiles is established. Concrete examples are considered
and carried out up to the numerical results.
Taking

$$z(w) = \frac{1}{2}\left[g_1(w) + g_2(w) \right] \; ; \; \frac{\partial z}{\partial g_1} = \frac{\partial z}{\partial g_2} = \frac{1}{2}$$

as the function $z(w)$ then one obtains an result investigated in an earlier
Card 2/3

29849
S/044/61/000/007/018/055

On a new method for the determination ...   C111/C222

paper by L.A. Simonov (Prikl. matem. i mekhan., 1947).
There are 3 references.

[Abstracter's note : Complete translation.]

Card 3/3

10.1200   1327 1502 2607

AUTHOR: Panov, Lyuben

TITLE: Potential flow of an incompressible fluid in a plane nozzle

TEXT: It is stated that, starting from the complex potential of a given symmetric contour, the complex potential of the flow of an ideal fluid in a plane nozzle can be obtained with the aid of the conformal mapping

$\zeta = e^z$. Here it is assumed that the consumption of the flow is given and that the velocity in infinity is uniformly distributed over the cross section of the channel. The author uses the method described in the preceding article (abstract 7 B 140), he uses the known complex potential for the flow around simplest symmetrical profiles and constructs the flow in a plane nozzle the form of which is little different from the nozzles in practice. The equations of the flow lines and the equipotential lines are given explicitly. Concrete examples are considered,

Card 1/2

29850
S/044/61/000/007/019/055
Potentiɑl flow of an incompressible ...   C111/C222

the net of flow lines and the equipotential lines is constructed for an
example. It is proved that a series of new more complicated flows can
be constructed with the described method by a "summation" of known
elementary flows.

[Abstracter's note: Complete translation.]

Card 2/2

YUGOSLAVIA/Soils Science - Cultivation, Improvement, Erosion.   J

Abs Jour   : Ref Zhur Biol., No 22, 1958, 100120

Author   : Panov, M.
Inst   :
Title   : Soil Erosion in the Valley of the Krivolakavichka River

Orig Pub   :

Abstract   : Soils of the Krivolakavichka Riber's valley (southeas-
               tern Macedonia) are subjected to intensive erosive pro-
               cesses caused by the destruction of forests. Particular-
               ly important is the erosiveness of the left-bank soils.
               Here is developed a net of ravines, caused by landslides.
               Geomorphological characteristics of the region are des-
               cribed, and some applications for the afforestation of
               the eroded soils are indicated. -- G.A. Buyanovskiy

Card 1/1

- 83 -

PANOV, M.

New West European interstate organizations and the workers'
condition. Sots.trud 7 no.7:43-50 Jl '62.   (MIRA 15:8)
   (Europe, Western--International agencies)
   (European cooperation)
   (Europe, Western--Labor and laboring classes)

PANOV, M.

The catchment area of the Kriva Lakavica and Otinja Rivers. Bul
sc Youg 7 no.3:69 Je '62.

1. Geografski institut Prirodosl.-mat. fakult, Skopje.

PANOV M.

PANOV, M.

The European Coal and Steel Community and the situation of
the labor class. Sots. trud no.5:47-54 My '57.   (MIRA 10:6)
                    (European coal and steel community)
              (Europe, Western--Labor and laboring classes)

PANOV, K.

Soil erosion in Friva Lakavica Valley. p. 13
(GLASNIK, Vol. 36, No. 1, 1956 (Published 1957)

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, 1957
Uncl.

PANOV, M.

Financial instruments of the European Common Market and the European Atomic Authority. Fin. SSSR 19 no.4:80-86 Ap '58.   (MIRA 11:4)
(Europe, Western--Customs unions)
(Euratom (Proposed))

PANOV, M.

Financial aspects of the activity of the "European Coal and Steel
Community." Fin.SSSR 18 no.3:77-85 Mr '57.   (MLRA 10:5)
                (European Coal and Steel Community)

PANOV, M. A.

Sparzha /Asparagus_/. Moskva, Sel'khozgiz, 1952. 56 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.

PANOV, M.A., doktor sel'skokhoz. nauk

Intraspecific classification of the common onion (A. cepa L.)
Izv. TSKHA no.4:62-69 '64.   (MIRA 17:11)

1. Kafedra ovoshchevodstva Sel'skokhozyaystvennoy akademii
imeni Timiryazeva.

LEVENETS, N.P.; SAMARIN, A.M.; SEMIKIN, I.D.; KAZAKOV, V.E.; BEMBIMEK, Ye.I.;
PANYUKHNO, L.G.; SVINOLOBOV, N.P.; AVERIN, S.I.; SMIRNOV, V.M.;
ZELENSKIY, V.D.; LAYKO, B.G.; TISHCHENKO, O.I.; OKHRIMOVICH, B.P.;
DANILOV, A.M.; TISHKOV, Yu.Ya.; PANOV, M.A.; MARKELOV, A.I.;
PETROV, A.K.; VASILEVSKIY, P.A.; PASYUK, K.I.; NESTEROV, V.I.;
KHRUSTAL'KOV, L.A.; GLAZKOV, V.S.; MAKAGON, V.G.; FOMIN, G.G.;
TRISHCHENKO, V.D.; KORZH, V.P.; SUYAROV, D.I.; ARSEYEV, A.V.;
PAVLYUCHENKO, A.A.; ZHADAYEV, V.G.; KONDORSKIY, R.I.; MOROZOVA,
I.A.; KOCHETOV, V.V.; PRUZHINER, V.L.; MALEVICH, I.A.;
MALIOVANOV, D.I.; ZAKOVRYASHIN, I.I.; NOVSKIY, I.S.; NOVIKOVA,
V.P.; GRISHIN, K.N.; MOSKOVSKAYA, M.L.; KORNEYEV, B.M.

Inventions. Met. i gornorud. prom. no.3:75-76 My-Je '64.

(MIRA 17:10)

PANOV, Mikhail Aleksandrovich; CHERNYAKOVA, L.S., redaktor; ROSLOV, G.I.,
        tekhnicheskiy redaktor

[Growing mushrooms] Vyreshchivanie shampin'onov. Moskva, Gos.
izd-vo torg.lit-ry, 1956. 137 p.   (MIRA 10:9)
        (Mushrooms)

PANOV, Mikhail Aleksandrovich, kandidat sel'skokhozyaystvennykh nauk;
KAZAKOVA, Ye.D., redaktor; GUREVICH, M.M., tekhnicheskiy redaktor

[Perennial vegetable crops] Mnogoletnie ovoshchnye kul'tury.
Moskva, Gos. izd-vo selkhoz. lit-ry, 1955. 126 p.   (MLRA 9:8)
        (Perennials)   (Vegetable gardening)

SOV/102-58-4-10/11

AUTHOR: Panov, M.D.

TITLE: The Consequences of Automation and of Other Forms of
             Technical Progress

PERIODICAL: Avtomatika, 1958, Nr 4, pp 83-84 (Ukr.SSR)

ABSTRACT: This is a summary of the report of D.A. Morse, Director
             of the International Labour Organization, at Geneva,
             June, 1957.

Card 1/1

PANOV, M. D.

Uproshchennye konstrukaii nekotorykh gidravlicheskikh pressov vspomogatel'nogo nazacheniia (Vestn. Mash., 1951, no. 2, p. 16-18)

Simplified designs of some auxiliary hydraulic presses.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953

PANOV, M.D.

Report of the General Director of the International Labor
Organization D.A.Morse on automation and its consequences.
Avtomatyka no.4:83-84 '58.   (MIRA 12:1)
                       (Automation)

PANOV, M. D.

Packing (Mechanical Engineering)

Using substitutes for non-ferrous metals in the parts of a gasket packing. Vest. mash. 31 no. 10, 1951.

9. **Monthly List of Russian Accessions**, Library of Congress, _____September, 1952 1955. Unclassified.

PANOV, M. D.

USSR/Engineering - Foundry, Equipment   Nov 51

"Shake-Out Grates With Electric Drive," M. D. Panov, "Krasnoye Sormovo" Plant

"Litey Proizvod" No 11, pp 12, 13

Describes 2,200x1,200 mm grate of 7.5-ton loading capacity. Using 11.4 kw motor, it shows advantages over pneumatic system. Designer, Engr M. G. Berenkov, received 4th prize in All-Union Contest of 1952 for Best Suggestion on Conservation of Electric and Heat Power.

198T16

..... m. D.

2. USSR (600)

7. Construction of Auxiliary Hydraulic Presses, <u>Information Digest for Machine</u> <u>Construction</u>, Feb 1952, Moscow

9. Compilation of Information on the USSR Machine and Machine Tool Industry Contained in Soviet Publications. ATIC 101339-AB.

1. SHUMKOV, P. V.,   PANOV, M.D.

2. USSR (600)

4. Lathes

7. Efficient repair of the lathes by mechanic. Vest mash No. 9   1952.

9. Monthly List of Russian Accessions, Library of Congress, _____April_____ 1953, Uncl.

PANOV, M. D., ENG.

Extrusion (Metals)

Hydraulic extruder GV_v 50-53. Vest. mash. 32 No. 3, 1952.

PANOV, Mikhail Dmitriyevich, kand. ekonom. nauk; PARTOSH, L.Z., red.;
RAKITIN, I.T., tekhn. red.

[Dissipation and luxury amidst destitution] Rastochitel'stvo i
roskosh' sredi nishchety. Moskva, Izd-vo "Znanie," 1962. 31 p.
.Novoe v zhizni, nauke, tekhnike. III Seriia: Ekonomika, no.7)

(Capitalism)   (MIRA 15:6)

PANOV, Mikhail Dmitriyevich, kand. ekon. nauk; PARTOSH, L.Z., red.;
RAFITIN, I.T., tekhn. red.

[Extravagance and luxury among poverty] Rastochitel'stvo i
roskosh' sredi nishchety. Moskva, Izd-vo "Znanie," 1962. 31 p.
(Novoe v zhizni, nauke, tekhnike. III Seriia: Ekonomika, no.7)
(MIRA 15:5)
(Labor and laboring classes)

PANOV, M.F., starshiy elektromekhanik

We need the help of the factories. Avtom., telem. i sviaz' 5
no.5:41 My '61.   (MIRA 14:6)

1.Chelyabinskaya distantsiya signalizatsii i svyazi Yuzhno-Ural'skoy
dorogi.   (Railroads--Switches)

PANOV, M. G.

AUTHORS: Vuks, M. F.,   Panov, M. G.   54-4-3/20

TITLE: Investigation of the Polarization Anisotropy of Moleoules
              of Ortho-, Meta-, and Para-Dichlorbenzenes, Dibromobenzenes,
              and Xylenesby Scattering of Light in Solutions
              (Izucheniye anizotropii polyarizuyemosti molekul orto-,
              meta-i paradikhlorbenzolov, dibrombenzolov i ksilolov po
              rasseyaniyu sveta v rastvorakh).

PERIODICAL: Vestnik Leningraskogo Universiteta Seriya Fiziki i
              Khimii,   1957, Vol. 22, Nr 4, pp. 14-18 (USSR)

ABSTRACT: The influence of the position of two substituents on the
              optical anisotropy and the polarization tensor of the above
              mentioned compounds is investigated. The results are compared
              with those of an additivity scheme. The values for
              dichlorobenzenes and dibromobenzenes are essentially higher
              than the additive ones. This pheomenon is explained by the
              linking of the r-electrons of halogen with the l-electrons of
              the benzene ring. With xylene the obtained values are some-
              what lower than the additive ones. The latter is difficult
              to explain, but is, with reservation, ascribed to the
              induction effect.

Card 1/2

Investigation of the Polarization Anisotropy of Molecules   54-4-3/20
of Ortho-, Meta-. and Para-Dichlorbenzenes, Dibromobenzenes,
and Xylenes by Scattering of Light in Solutions

There are 2 figures, 2 tables, and 6 references,
3 of which are Slavic.

SUBMITTED: March 27, 1957

AVAILABLE: Library of Congress

Card 2/2

PANOV, M.G.

Anisotropy of polarizability dihydroxybenzene and nitrophenol molecules as determined by scattering in solutions. Vest. LGU 14 no.22:56-63 '59.

(MIRA 12:11)

(Benzene)   (Phenol)

VUKS, M.P.; PANOV, M.G.

Investigating the optical anisotropy of molecules of orto-, meta-
and paradichlorobenzene, dibromobenzene, and xylene by scattering
of light in solutions [with summary in English]. Vest. LGU 12 no.22:
14-18 '57.   (MIRA 11:2)

(Benzene--Optical properties)
(Xylene--Optical properties)
(Light--Scattering)

PRIOROV, N.N., prof.; PANOV, M.I., starshiy nauchnyy sotrudnik

Conservation of homologous tissues and their clinical use.
Ortop.,travm.i protez.   22 no.4:3-6 Ap '61.
(MIRA 14:11)

1. Deystvitel'nyy chlen AMN SSSR (for Priorov). Adres avtorov:
Moskva, G-21, Teplyy per., d.16, TSentral'nyy institut travmato-
logii i ortopedii.
(TISSUES—TRANSPLANTATION) (TISSUES—PRESERVATION)

PANOV, M. N., FEDORENKO, N. V., AFROSIMOV, V. V., GORDEYEV, Yu, S.,

"Characteristic Energy Losses in Single Collisions of Atomic Particles"

report presented at the 3rd Intl Conf. on Physics of Electronics and Atomic Collisions, London, 22-26 Jul 63

ACCESSION NR: AP4035696

AUTHOR: Gordeyev, Yu.S.; Panov, M.N.

S/0057/64/034/005/0857/0860

TITLE: Ionization and electron attachment by hydrogen ions in collisions with gas molecules and atoms

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 857-860

TOPIC TAGS: ionization, electron attachment, ionization phenomena, ion collision, nitrogen, argon, hydrogen

ABSTRACT: The cross sections for ionization and electron attachment by H^+, H_2^+ and H_3^+ ions in collisions with H_2, N_2, and A molecules were measured for incident ion energies from 1 to 40 keV, and the results are presented graphically and are compared with those of other workers. The apparatus employed was described by N.V.Fedorenko, V.V.Afrozimov and D.M.Kaminker (ZhTF 26,1929,1956). The ion beam was selected by a monochromator, defined by slits, and directed through a collision chamber containing gas at such pressure that multiple collisions could be neglected. The cross sections were calculated from the total electron current and the current of ionized gas molecules by neglecting the possibility of electron stripping from

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ACCESSION NR:AP4035696

the incident ions by the gas molecules. /Abstracter's note: The "potential method" by which the electron and ion currents were measured is not described in the present paper./ The means adopted by the authors cited above were employed to eliminate edge effects, and measures were taken to avoid the effects of secondary emission and reflection of ions scattered from the primary beam. The error of the measurements is estimated to be 15%. The ionization cross section increased monotonically with energy over the range investigated. The results deviated by more than the experimental error from those of H.B.Gilbody and J.B.Hasted (Proc.Roy.Soc.A240, 382,1957) but agreed satisfactorily with those of several other groups. The calculations of D.R.Bates and G.H.Gritting (Proc.Phys.Soc.A66,961,1953) reproduce the proton hydrogen cross sections satisfactorily for energies greater than 6 keV, but the calculated values are too small at lower energies. This discrepancy is ascribed to the use of the Born approximation in the calculations. The electron attachment cross sections reached maxima in the energy range investigated, the maxima occurring at higher energies for the heavier ions. The results agreed reasonably well with those of other workers, with one exception: the cross section obtained for electron attachment by H_2^+ from H_2 at 1 keV was considerably greater than that reported by S.N.Chosh and W.F.Scheridan (J.Chem.Phys.26,480,1957). The authors thank Prof.N.V.

Card 2/3

ACCESSION NR: AP4035696

Fedorenko and V.V.Afrpsimov for advice and constant interest in the work." Orig.
art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im.A.F.Ioffe AN SSSR Leningrad (Physico-
technical Institute, AN SSSR)

SUBMITTED: 05Jun63

SUB CODE: ME, NP

DATE ACQ: 20May64

NR REF SOV: 005

ENCL: 00

OTHER: 007

Card 3/3

ACC NR: AP5026412   SOURCE CODE: UR/0386/65/002/006/0291/0296

AUTHOR: Afrosimov, V. V.; Gordeyev, Yu. S.; Panov, M. N.; Fedorenko, N. V.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Ionization and scattering with characteristic energy losses in atomic colli-sions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 6, 1965, 291-296

TOPIC TAGS: atomic physics, ionization, collision cross section, argon, krypton, neon

ABSTRACT: This is a continuation of an earlier investigation (ZhTF v. 34, 1613, 1624, and 1637, 1964) of the elementary acts of collisions between ions and argon atoms having kev energies at impact parameters smaller than the atomic dimensions, where it was found that the spectrum of the excess inelastic loss is not continuous, but consists of relatively narrow discrete lines, the energies of which do not do

but consists of relatively narrow discrete lines, the energies of which do not depend on the shortest distance between the nuclei, on the relative velocity of the particles, or on the scheme of the elementary process by which the charge states are changed. To determine the extent to which the observed phenomenon is general, the authors investigated collisions between ions and atoms of different noble gases. The measured excess inelastic energy loss R^* for the Ne^+ + Ar pair was found not to de-

Card 1/3

L 9298-66

ACC NR: AP5026412

pend on the scheme of the elementary process. Excitation of several R^* lines was observed in the investigated interval of shortest distances between the nuclei of the colliding particles. The regions in which one R^* line is excited, and the region where the transition occurs from excitation

────────────── potential is not a continuous function

Card 2/3

L 9296-66

ACC NR: AP5026412

of the shortest distance, but changes abruptly on going from the excitation of one characteristic line to the excitation of another. It is difficult at present to present an unambiguous interpretation of the observed effects. The explanation offered earlier, based on the assumption that vacancies are produced in the inner shells of the colliding particles and are followed by Auger transitions, in in poor agreement with the experimental data, as are other hypotheses. Authors thank M. Ya. Amus'ya for a discussion of the results and A. P. Shergin and Z. Z. Latypov for help with some of the measurements. Orig. art. has 3 figures.   44,55

... some of the measurements. Orig. art. has 3 figures. 44,55 ... for help

SUB CODE: 20/   SUBM DATE: 29Jul65/   ORIG REF: 002/   OTH REF: 004   44,55

44,55

Card 3/3

ACC NR: AP6004887

SOURCE CODE: UR/0057/66/036/001/0123/0131

AUTHOR: Afrosimov,V.V.; Gordeyev,Yu.S.; Panov,M.N.; Fedorenko,N.V.

63
60
B

ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-tekhniches-kiy institut AN SSSR)

TITLE: Ionization and scattering with characteristic energy losses in atomic collis-ions

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 123-131

TOPIC TAGS: ionization, inelastic scattering, excitation energy, particle collision, ion energy   argon, neon, krypton,

ABSTRACT: The characteristic inelastic energy losses (energies carried off by elec-trons and radiation), previously investigated in Ar^+-Ar collisions by the present authors (Compt. Rend. de la VI-e Conf. Int. Phen. d'Ionisat. dans les Gaz, eds. SERMA, 1, 111, Paris, 1963; ZhTF 34, 1613, 1964; ZhTF, 34, 1624, 1964; ZhTF, 34, 1637, 1964) and confirmed by E.Everhart et al (Phys. Rev. Lett., 14, 247, 1965; Phys. Rev. Lett., 14, 484, 1965), have been further investigated in Ne^+-Ne, Ar^+-Ar, Kr^+-Kr, and Ne^+-Ar collisions at incident ion energies of 12, 25, and 50 keV, using the apparatus and techniques described in the earlier papers. Characteristic inelastic energy loss "lines" were observed in all the investigated systems. The

"lines" were observed in all the investigated systems. The probabilities for "excita-
tion" of the different "lines" (occurrence of the different characteristic energy

Card 1/2

IDC: 533.9

ACC NR: AP6004887

3

losses) were nearly independent of the incident ion energy but depended strongly on the
distance of closest approach; the positions of the lines, however, did depend somewhat
on the incident ion energy. The curves representing the composition with respect to
charge of the scattered particles as a function of scattering angle revealed regions of
slow and rapid change associated with excitation of the different characteristic lines,
and the differential cross section deviated from a smooth curve at scattering angles
associated with excitation of the characteristic lines. There was no simple relation
between the characteristic lines excited in Ne$^+$-Ar collisions and those excited in
Ne$^+$-Ne and Ar$^+$-Ar collisions; from this it is concluded that the lines are not to be
ascribed to excitation of any energy levels characteristic of the isolated atoms.
Difficulties are pointed out that are encountered in attempts, including the attempt of
U.Fano and W.Lichten (Phys. Rev. Lett., 14, 627, 1965), to account for the experimental
results by invoking Auger transitions. The authors argue in favor of their earlier
hypothesis involving excitation of collective vibrations of the electron shells. The
authors thank M.Ya.Amus'ya for valuable discussions

hypothesis involving excitation of collective vibrations of the electron shells. The
authors thank M.Ya.Amus'ya for valuable discussions, and A.P.Shergin and Z.Z.Latypov
for participating in the work. Orig. art. has: 7 figures.

SUB CODE: 20/   SUBM DATE: 05Aug65/   ORIG REF: 002/   OTH REF: 008

Card 2/2 dda

AFROSIMOV, V.V.; GORDEYEV, Yu.S.; PANOV, M.N.; FEDORENKO, N.V.

Ionization and scattering in the characteristic energy losses in atomic collisions. Pis'. v red. Zhur.eksper. i teor.fiz. 2 no.6:291-296 S '65.   (MIRA 18:12)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR. Submitted July 29, 1965.

AFROSIMOV, V.V.; GORDEYEV, Yu.S.; PANOV, M.N.; FEDORENKO, N.V.

Use of the method of coincidences in studying elementary events of atomic collisions. Zhur. tekh. fiz. 34 no.9:1613-1623 S '64.

(MIRA 17:10)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR, Ieningrad.

AFROSIMOV, V.V.; GORDEYEV, Yu.S.; PANOV, M.N.; FEDORENKO, N.V.

Characteristic energy losses in atomic collisions. Zhur. tekh. fiz.
34 no.9:1624-1636 S '64.   (MIRA 17:10)

1. Fiziko-tekhnicheskiy institut imeni A.F. Ioffa AN SSSR, Leningrad.

AFROSIMOV, V.V.; GORDEYEV, Yu.S.; PANOV, M.N.; FEDORENKO, N.V.

Elementary processes in atomic collisions inv.lving changes in
charge states. Zhur. tekh. fiz. 34 no.9:1637-1644 S '64.

(MIRA 17:10)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR, Leningrad.

PANOV, M.P.; IVANITSKIY, Ye.A.; MEL'NICHUK, Ya.G.

Practice of shooting wells with TShB torpedoes. Neft. khoz.
40 no.1:65-68 Ja '62.   (MIRA 15:2)
            (Oil wells--Equipment and supplies)

11(0)   SOV/93-58-9-10/17

AUTHOR: Panov, M.P., Ivanitskiy, Ye.A., Shvay, L.P. and Shvets, A.P.

TITLE: The Production of Vertical Fractures by the Hydraulic
               Fracturing Process (Obrazovaniye vertikal'nykh treshchin
               pri gidrorazryve)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 9, pp 56-59 (USSR)

ABSTRACT: This is the first part of a study of the direction of
               fractures produced by hydraulic fracturing. The study
               was carried out by the industrial department of the
               UkrVNIGNI Institute. The laboratory experiments were
               carried out on a unit which was designed by E.B. Chekalyuk,
               an engineer, and improved by the authors of the present
               article. The text gives a detailed description of the
               experimental equipment which is shown in Figures 1-9.
               The experimental results will be presented in "Neftyanoye
               khozyaystvo," 1958, Nr 10. There are 9 figures.

Card 1/1

PANOV, M.P.

Instrument for measuring deflections of wells. Izm.tekh. no.4:
10-11 Ap '59.   (MIRA 12:5)
           (Oil wells--Equipment and supplies)

11(0)

AUTHOR: Panov, M.P., Ivanitskiy, Ye.A., Shvay, L.P., and Shvets, A.P.

TITLE: The Development of Vertical Fractures in Hydraulic Fracturing
          (Obrazovaniye vertikal'nykh treshchin pri gidrorazryve)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 10, pp 39-43 (USSR)

ABSTRACT: This is a continuation of an article published in "Neftyanoye khozyay-
stvo", 1958, Nr 9. The present article presents the results of 16 fracturing
operations carried out under laboratory conditions (Table 1). The experiments
showed that all the samples developed vertical fractures, that 54.1 percent of
the cases developed two fractures (Table 2), that the vertical and radial
fractures were shallow, and that the fractures developed in a vertical direct-
ion in spite of an attempt to orient them otherwise. The development of the
fractures in a vertical direction is in contradiction with the view of many
authors who maintain that fractures must develop along the lines of the rock
strata. There are 2 tables and 2 Soviet references.

Card 1/1

PANOV, M.P.; IVANITSKIY, Ye.A.; SHVAY, L.P.; SHVETS, A.P.

Vertical fractures formed by the hydraulic fracturing of strata (conclusion). Neft.khoz. 36 no.10:39-43 O '58. (MIRA 11:12)
(Oil wells--Hydraulic fracturing)

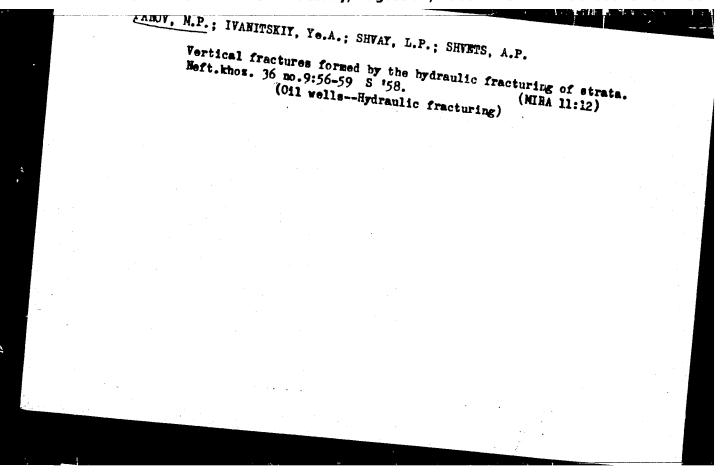KARUV, M.P.; IVANITSKIY, Ye.A.; SHVAY, L.P.; SHVETS, A.P.

Vertical fractures formed by the hydraulic fracturing of strata.
Neft.khoz. 36 no.9:56-59 S '58.
(Oil wells--Hydraulic fracturing)   (MIRA 11:12)

11(4)

AUTHOR: Panov, M.P.

TITLE: A Device for Determining the Curvature of Oil Wells
            (Pribor dlya izmereniya krivizny skvazhin)   SOV/115-59-4-6/27

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 4, pp 10-11 (USSR)

ABSTRACT: When drilling oil or gas wells, various methods are
            used for determining the shaft deflection. Most me-
            thods are based on etching a glass plate by hydro-
            fluoric acid. The author and I.M. Chirko developed
            a new method for determining the curvature of wells
            without the application of hydrofluoric acid. For
            this purpose, a device is used, as shown by a dia-
            gram. A piece of photographic paper, developed to
            full blackness, is installed in one chamber of this
            device. The chamber is then filled to a certain
            level with a mixture of hyposulfite and potassium
            ferricyanide solutions. If the well temperature
            is below 70°C, 10 parts of hyposulfite solution are
            used; if it is higher than 70°C, 20 parts are re-

Card 1/2

A Device for Determining the Curvature of Oil Wells   SOV/115-59-4-6/27

quired. In either case, 1 part of potassium ferri-
cyanide is used. The effectiveness of the mixture
begins 8-10 minutes after mixing and ends within
18-20 minutes. When the device is lowered into the
well, the liquid will bleach the photographic paper
according to the angle of deflection. The author
developed a special protractor for a precise deter-
mination of the well curvature. There is 1 diagram.

Card 2/2

Panou, M.P

AUTHOR: Panov, M. P., and Ivanitskiy, Ye. A.

TITLE: Results of Introducing Cumulative Perforation and Torpedoing (Rezul'taty vnedreniya kumulyativnykh perforatsii i torpedirovaniya)

93-58-3-11/17

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 3, pp 45-47 (USSR)

ABSTRACT: The article states that perforation with cumulative perforators and torpedoes increased the yield of oil. This method was successfully carried out in a depleted oilfield of the Boryslav Petroleum Administration (NPU Boryslavneft/). Fig. 1 gives the production curves before and after perforation with a PK-103 perforator. Fig. 2. gives the production curves before and after application of a TK-PP-114 torpedo. Fig. 3 shows the detailed design of a TK-PP-114 torpedo. The charge gear and the cumulative perforators were developed by the Perforator Laboratory of the Scientific Research Institute of Geophysical Prospecting Methods (Laboratoriya perforatsii NIGGR) and are currently produced in two models: PK-103 for +60° temperatures and PK-103T for

Card 1/2

Panou, M.P

Results of Introducing Cumulative Perforation (Cont.)   93-58-3-11/17

temperatures up to +160°. The authors conclude that in view of the suc-
cessful experiment at the Boryslav oilfield cumulative perforators may be
recommended for opening dense formations and that TK-PP-114 torpedoes increase
the oil yield of dense sandstone formations. There are 2 tables and 1 figure.

AVAILABLE: Library of Congress

Card 2/2

PANOV, M.P.; IVANITSKIY, Ye.A.

Introducing cumulative perforation and shooting. Neft. khoz. 36
no.3:45-47 Mr '58.
(Petroleum engineering)   (MIRA 11:4)

Panov, M.P.

PANOV, M.P.; IVANITSKIY, Ye.A.

Drilling multiwell penetrations in fields of the Borislav Petroleum Trust. Neft. khoz. 35 no.11:47-49 N '57.

(Borislav region--Oil well drilling)   (MIRA 10:11)

PANOV, M.P., inzh.; IVANITSKIY, Ye.A.

Processing of yield graphs of deep wells exploited periodically.
Neftianik 6 no.2:10-13 F '61.
(MIRA 14:10)

1. Promyslovyy otdel Ukrainskogo nauchno-issledovatel'skogo
geologo-razvedochnogo instituta (for Panov). 2. Glavnyy inzh.
Neftepromyslovogo upravleniya Borislavneft' (for Ivanitskiy).
(Oil fields--Production methods)

PANOV, N. [translator]; KARTUZOV, P. [translator]; BOCHAROVA, Z. [translator]; KURYLEV, Ye.S., dotsent [translator]; RYUTOV, D.G., kand.tekhn. nauk, red.; CHICHKOV, N.V., red.; SUDAK, D.M., tekhn.red.

[Ninth International Congress on Refrigeration; collection of reports] IX Mezhdunarodnyi kongress kholoda. Sbornik dokladov. Pod red. D.G.Riutova. Moskva, Gos.izd-vo torg.lit-ry, 1958. 197 p.
(MIRA 12:7)

1. Mezhdunarodnyy kongress kholoda. 9th, Paris, 1955. 2. Laboratoriya tekhnicheskoy informatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta kholodil'noy promyshlennosti (im.A.I. Mikoyana) (for Panov, Kartuzov, Bocharova). 3. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (for Kurylev).

(Refrigeration and refrigerating machinery--Congresses)

PANOV, N., inzh.-polkovnik

Evaluating technical skills of flight crews. Av. i kosm. 48 no.9:75-
77 S '65.
(MIRA 18:8)

PANOV, N.

In the North Atlantic. Vympel 11 no.4:16-18 F '48.

(Dry docks)   (MIRA 12:9)

PANOV, N.

Determination of the heat capacities of the liquid products of synthetic-rubber production. N. Panov and I. Dudnikov. *Sbornik Trudov Opytnogo Zavoda im. Akad. S. V. Lebedeva* 1938, 30–40; *Khim. Referat. Zhur.* 2, No. 4, 24(1939).—The detns. were made by immersing a bulb contg. the substance (heated to a definite temp.) in a water calorimeter. The values obtained were: for piperylene (b. 41.6°) $C = 0.3747 + 2 \times 0.000880 + 3 \times 0.0000104 t^2$; for primary BuOH (b. 116.6°) $C = 0.6053 + 2 \times 0.000488 + 3 \times 0.0000026 t^2$; for sec-BuOH (b. 110.2°) $C = 0.655 + 2 \times 0.000404 + 3 \times 0.0000061246 t^2$; for sec-AmOH (b. 138.1°) $C = 0.502 + 2 \times 0.00113 t + 3 \times 0.0000042 t^2$; for MeEtCO (b. 79.9°) $C = 0.4242 + 2 \times 0.000811 + 3 \times 0.0000346 t^2$; for Bu$_2$O (b. 140.5°) $C = 0.217 + 2 \times 0.000162 + 3 \times 0.0000066 t^2$.   W. R. Henn

PANOV, IV

Physicochemical constants of the hydrocarbon fraction used for regenerating rubber. K. Kuchinskaya and N. Panov. *Sbornik Trudov Opytnogo Zavoda im Akad. S. V. Lebedeva* 1939, 50-2; *Khim. Referat. Zhur.* 2, No. 4, 24 (1939).—The hydrocarbon fraction, dried over CaCl₂ for 54 hrs. and filtered, gave d₂₀ 0.8590, vapor pressure (by the dynamic method) log p = 7.89 − (2083.21/T), heat of vaporization (at 145°) 77.3 cal. per g., heat capacity at 20.5° to 150.5° C = 0.3746 + 2 × 0.000033, mol. wt. 130.06.   W. R. Henn

S/081/62/000/020/012/040
B159/B101

AUTHORS: Bakalov, D., Panov, N., Sumerska, M., Robev, St.

TITLE: Examination of certain nitro-derivatives of aromatic
              amidines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 149, abstract
              20Zh125 (Doklad. Bolg. AN, v. 14, no. 8, 1961, 811-814
              [summary in Eng.])

TEXT: 3-nitro-4-methyl-(I), 3-nitro-4-methoxy-(II), 3-nitro-4-chloro-(III)
and N-(4-nitrophenyl)-benzamidine (IV), which have a possible
radiobiological and pharmocological activity, are obtained when aromatic
monoaryl substituted amidines are nitrated. At ≥ 0°C, 51 millimoles
N-phenylbenzamidine are added to 40 ml HNO₃ (d 1.52) and after 10 min
poured out in an excess of 5% cold KOH, giving IV, yield 89%, m.p. 168°C
(from alcohol); hydrochloride (HC), m.p. 207-209°C (from alcohol);
hydrobromide (HB), m.p. 236-238°C (from alcohol); hydroiodide (HI), m.p.
223-224°C (from aqueous alcohol); picrate, m.p. 162-163°C; aniline-formyl

Card 1/2

ROEEV, S.; PANOV, N.

Synthesis of some n-aryl substituted amidines of 10-alkylpheno-
thiazine-3-carbon oxides. Doklady BAN 17 no.6:577-580 '64

1. Vorgelegt von A. Spassov [Spasov, A.], korr. Mitglied der
Akademie.

SPASOV, Al.; PANOV, N.

On the octachlorophenothiazine and its preparation through the inter-
action of phenothiazine and some of its derivatives with sulfuryl
chloride. Godishnik khim 54 no.3:233-240 1959/60 (pub. '61)
(EEAI 10:9)

(Chlorophenothiazine)   (Sulfuryl chloride)

1/1

BULGARIA

ROBEV, S., BAYEV, I., PANOV, N., Institute of Radiology and Radiation Hygiene, Sofia

"A Study of the Radiation Protection Induced by 3-3'-Dithio-Bis-Propio Amidine"

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 19, No 11, 1966, pp 1035-1037

Abstract: /Russian article/ The authors showed recently that some of the newly synthesized N-aryl-substituted aromatic amidines exhibit clear radiation protection effects in bacteria (St. Robev, S. Todorov, Dokl. AN SSSR, 132, 1960, 1201) and in mammals (see, e.g., I. Baev, St. Robev, Compt. rend. Acad. bulg. Sci., 15, 1962, No 6, 613). These and other results point to the possibility of increasing the radiation protection effect by means of functional groups in compounds containing sulfhydryl or a potential sulfhydryl and amidine group. Consequently, the present work investigated in 662 white mice the radiation protection supplied by the 3-3'-dithio-bis-propio amidine, and the effects of antagonism and synergism with adrenalin and hexamethonium. Results show that the above compound exhibits excellent radiation protection effect even during supralethal irradiation doses. It is close to the strength of radio protection observed with cysteamine. Other combined applications of propioamidine and with

.1/2

PANOV, N. A.

Panov, N. A. "X-ray charts of acute interstitial pneumonia in infants one month old", Trudy VI Vsesoyuz. s'yezda det. vrachey, posvyashch. pamyati prof. Filatova, Moscow, 1948, p. 160-63

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

PAKCV, N.A. (prof.)

Respiration

Roentgenokymographic study of pulmonary respiration in infants. Pediatriia, no. 2,
1952

9. Monthly List of Russian Accessions, Library of Congress, _August_ 1952, Uncl.