SMORCHKOV, A·D.

V4025.   ARRANGEMENT FOR RECTIFIED OPERATING CURRENT.
A.D.Smorchkov and O.P.Shishkin.
Elekt. Stantsii, 1956, No. 13, 40-x. In Russian.
    Discusses arrangements for supplying direct current for control
and protection of 35 and 6 kV substations. The normal rectifier is
supplied from the station auxiliaries, but in emergency when the a.c.
voltage becomes too low owing to overloading of station circuits a
second, parallel rectifier, supplied from the secondaries of the cur-
rent transformers of the incoming feeders through a saturated core
voltage stabilizer, maintains the d.c. voltage. Results of measure-
ments on current transformers of Russian make are discussed with
respect to optimum circuit design. Experience was encouraging
over two years, at the end of which, 25 substations in the oil industry
had this type of control current supply.   F.Busemann

KAZANSKIY, Vladimir Yevgen'yevich; SMORCHKOV, A.D., inzh., red.; BORUNOV,
        N.I., tekhn.red.

        [Electric current transformers in relay protection systems]
        Transformatory toka v skhemakh releinoi zashchity. Moskva,
        Gos.energ. izd-vo, 1958.   157 p.   (MIRA 12:3)
                (Electric relays)   (Electric transformers)

AUTHOR: Smorchkov, A.D., Engineer   SOV-91-58-4-28/29

TITLE: The Lowering of the Power Consumption in the Cutoff Coils
               of Loading Switch Drives (Umen'sheniye potrebleniya
               moshchnosti otklyuchayushchimi katushkami gruzovykh privo-
               dov vyklyuchateley)

PERIODICAL: Energetik, 1958, Nr 4, pp 36-39 (USSR)

ABSTRACT: The power consumption of the cutoff coils of loading switch
               drives manufactured by the Soviet industry ("PG-10", "PGM-
               10" and "UGP-51" types) attain 100 va. Coils fed by cur-
               rent transformers are widely used and the problem of lower-
               ing their power consumption is acute because of the limited
               power of the current transformers. Coils fed by voltage
               transformers are mainly used in automation devices ("AVR",
               "APV" and other types). The cutoff coils are solenoid
               electromagnets, and their power consumption depends on the
               position of their armature. The article gives the propor-
               tions between the maximum and minimum power consumption for
               coils operating either with constant voltage or with con-
               stant current. If the coils are fed by a "TKB" type trans-
Card 1/4   former, the proportion between the maximum and minimum
               power consumption is reduced, but the absolute value of the

SOV-91-58-4-28/29

The Lowering of the Power Consumption in the Cutoff Coils of Loading
Switch Drives

power consumption remains 100 va because of the low effi-
ciency of this transformer. For the a.c. cutoff coils,
there is a function between their power consumption with
released armature and the work they can perform. This
function is shown by graphs in figure 1 and the correspond-
ing formulae are given. The author states that the arma-
ture used at present in the cutoff coils of loading switch
drives is too heavy and that a reliable operation can be
guaranteed only if the weight of this armature is reduced
by three times. This would result at the same time in a
reduction of the power consumption by 50 %. The stopper
and its position also influences the value of the power
consumption (Figure 2), as well as the air gap (Figure 3).
The air gap commonly used is 15 mm, and it is advisable
that it be reduced to 10-12 mm, which would reduce the
power consumption by 25 to 30 %. The hysteresis and eddy
current loss can also attain 20 to 30 % of the power con-
sumption, if the cutoff coil is not designed with care.
The article gives data on a cutoff coil, which has been

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The Lowering of the Power Consumption in the Cutoff Coils of Loading
Switch Drives

manufactured and tested on the "PG-10" type loading switch
drive. It has a hollow armature with spring (Figure 4).
Tests have shown that such a cutoff coil has a power con-
sumption not exceeding 25 va. Its power factor is 0.3 to
0.4. Therefore, its power consumption can also be lowered
either by compensating the reactive power consumption by
a capacitance or by feeding it with a rectified current.
The latter method is more efficient. A table contained
in the article gives the results of tests carried out with
sinusoidal, rectified and direct current. A bridge circuit
with selenium rectifiers of the "VS-35" type has been uti-
lized for these tests. Futher reduction of the power con-
sumption can be obtained by utilizing a coneshaped hollow
armature with conical stopper and spring (Figure 5). Tests
carried out with such a cutoff coil on the "PG-10" type
drive showed that 10 va would be sufficient for reliable
operation. The author, making a comparison between a.c.
and d.c. cutoff coils , and comes to the conclusion that

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SOV-91-58-4-28/29

The Lowering of the Power Consumption in the Cutoff Coils of Loading
Switch Drives

the rectified current is the most advisable.
There are 4 graphs, 4 diagrams and 1 table.

1. Solenoids--Performance   2. Solenoids--Design   3. Switches
--Equipment

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SMORCHKOV, A.D., inzh.

Saturating transformers in protection arrangements using operational
a.c. Elek. sta. 29 no.7:46-47 Jl '58.   (MIRA 11:10)
   (Electric transformers)

BARZAM, Anatoliy Bentsionovich; ZEYLIHDZON, Ye.D., retsenzent;
SIROTINSKIY, Ye.L., retsenzent; SMORCHKOV, A.D., inzh., red.;
LARIONOV, G.Ye., tekhn.red.

[Automatic control of power s tems] Sistemnaia avtomatika.
Moskva, Gos.energ.izd-vo, 19 . 255 p.   (MIRA 12:4)
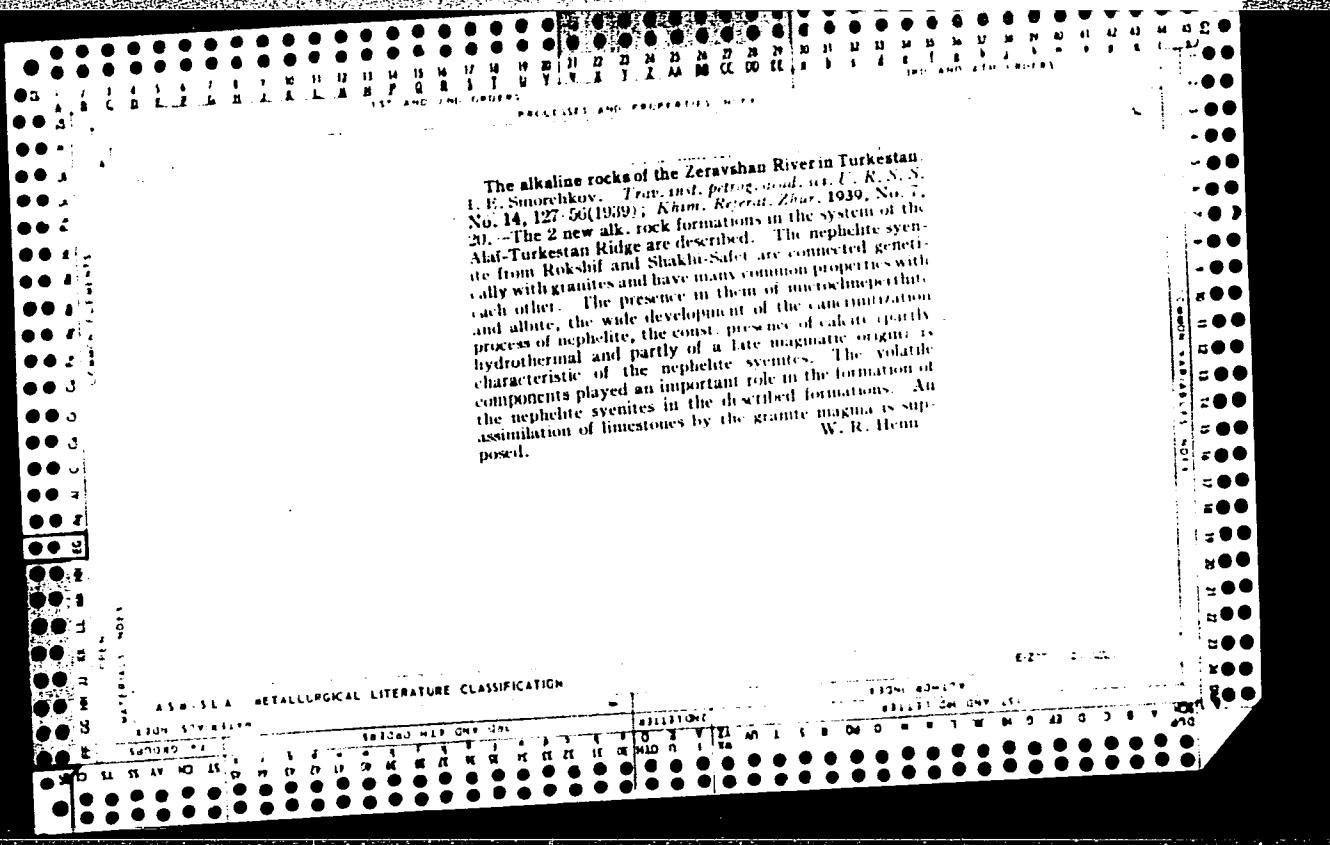   (Automatic control)   (:ctric engineering)

SKOROKHOV, A.P., Cand of Sci-- (diss.) "On the inter-
action between sight and movement in children of early age".
Moscow, 1958. 16 pp. (Second Moscow State Med Inst im. N.I.Pirogov).
200 copies. (KL, 28-58, 108).

SMORCHKOV, A.P.

Interaction of pneumonia and rickets [with summary in English]
Pediatriia 36 no.5:64-72 My '58   (MIRA 11:6)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - prof. P.A.
Ponomareva) II Moskovakogo meditisnskogo instituta.
          (PNEUMONIA)
          (RICKETS)

The alkaline rocks of the Zeravshan River in Turkestan. I. E. Smorchkov. *Trav. inst. petrog. acad. sci. U. R. S. S.* No. 14, 127-56(1939); *Khim. Referat. Zhur.* 1939, No. 7. 20).—The 2 new alk. rock formations in the system of the Alaf-Turkestan Ridge are described. The nephelite syenite from Rokshif and Shaklu-Safet are connected genetically with granites and have many common properties with each other. The presence in them of microclineperthite and albite, the wide development of the calc. mineralization process of nephelite, the const. presence of calcite partly hydrothermal and partly of a late magmatic origin is characteristic of the nephelite syenites. The volatile components played an important role in the formation of the nephelite syenites in the described formations. An assimilation of limestones by the granite magma is supposed.

W. R. Henn

SMORCHKO/, I·Ye·

Map: ZERAVSHAN, River   OSU-Am2288   S-336,S-328

Smorchkov, I. Ye.: Shchelochnyye Porody Reki Zeravshana
v Turkestane.
Trudy Petrograficheskogo Instituta, Vyp. 14, p. 128,
Moskva-Leningrad, 1939.
Izdaniye Akademii Nauk SSSR.
Library of Congress, Washington, D.C.   QE420-A6
Sketch of the upper part of the Zeravshan River region.
Scale (approx.) 1:300,000.
Area - 39°20' - 40°20' N; 70°00' - 72°15' E.

122

SMORCHKOV, I.Ye.

Certain regularities in the distribution of accessory minerals
along verticals of a granodiorite massif. (In: Akademiia nauk
SSSR. Voprosy petrografii i mineralogii. Moskva, 1953. p.179-183)
(MLRA 7:4)

(Granodiorite) (Mineralogy)

SMORCHKOV, I.Ye., kandidat geologo-mineralogicheskikh nauk.

Petrographic conference on the problems of "Regularities of the develop-
ment of magmatic differentiation in connection with mineral resources."
Vest. AN SSSR 23 no.5:103-107 My '53.   (MLRA 6:7)
                                        (Magma) (Ore deposits)

SMORCHKOV, I.Ye.

Granitoids of the western part of the Borshchovochnyy Range.   Trudy Inst.
geol.nauk 148:156-189 '53.   (MLRA 6:12)
                    (Borshchovochnyy range--Granite) (Granite--Borshchovo-
                                        chnyy range)

SMORCHKOV, I. Ye.

USSR/ Geology - Granits

Card   1/1   Pub. 22 - 46/62

Authors   : Smorchkov, I. Ye.; Bespalova, I. D.; and Batyreva, N. N.

Title   : About the Mesozoic age of alaskite granits of the Kuraminsk mountain
              range

Periodical : Dok. AN SSSR 102/3, 595 - 597, May 21, 1955

Abstract   : Geological data are presented regarding the Mesozoic age of alaskite
              (rock of the granite clan) prevalent in the Kuraminsk mountain range
              of Central Asia. Two USSR references (1952).

Institution : Acad. of Sc., USSR, Inst. of Geol. Sc.

Presented by: Academician D. I. Shcherbakov, December 14, 1954

SMORCHKOV, I.Ye.; PAVLOVA, G.A.

Lode rocks from the Gavasay River region (Kurama Ridge) and some
characteristics of the distribution of accessory minerals in them. Trudy
IGEM no.21:186-197 ' 58.   (MIRA 12:1)
        (Kurama Ridge--Rocks, Igneous)

SMORCHKOV, I.Ye., OMEL'YANENKO, B.I.

Contact effect of alaskite granites of the Kurama Range (Central
Asia) on the surrounding granodiorites and effusive rocks. Trudy
IGEM no.27 '60.   (MIRA 13:7)
   (Kurama Range--Rocks, Igneous) (Metasomatism)

VOL'FSON, F.I.; KUSHNAREV, I.P.; LUKIN, L.I.; SMORCHKOV, I.Ye.;
    SONYUSHKIN, Ye.P.; TISHKIN, A.I.

Some problems of the formation of hydrothermal uranium deposits.
Izv.vys.ucheb.zav.;geol.i razv. 4 no.9:12-24 S '61.   (MIRA 14:9)

1. Institut tsvetnykh metallov i zolota imeni M.I. Kalinina i
Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii
i geokhimii AN SSSR.
                     (Uranium ores)

GORZHEVSKAYA, S.A.; SIDORENKO, G.A.; SMORCHKOV, I.Ye.

New modification of ferrusonite-βfergusonite. Geol.mest.red.elem.
no.9:28-29 '61.   (MIRA 14:9)
                        (Fergusonite)

AMSHINSKIY, N.N.; MARIICH, I.V.; MOLCHANOV, V.I.; ORLOVA, L.I.;
GORB, A.M.; KUZNETSOV, Yu.A., nauchn. red.; SMORCHKOV,
I.Ye., nauchn. red.; KRYZHANOVSKIY, V.A., ved.red.

[Accessories of the granitoids of the Altai and methods
for studying them] Aktsessorii granitoidov Altaia i me-
todika ikh izucheniia Moskva, Nedra, 1964.   175 p.
(MIRA 17:10)

1. Chlen-korrespondent AN SSSR (for Kuznetsov).

VINOGRADOV, A.P.; KORZHINSKIY, D.S.; SMIRNOV, V.I.; SHCHERBAKOV, D.I.;
AYDIN'YAN, N.Kh.; VINOGRADOV, V.I.; VOL'FSON, F.I.; GENKIN, A.D.;
DANCHEV, V.I., LUKIN, L.I.; OZEROVA, N.A.; PEREL'MAN, A.I.; REKHARSKIY,
V.I.; SMIRCHKOV, I.Ye.; FEODOT'YEV, K.M.; SHADLUN, T.N.; SHIPULIN, F.K.

Aleksandr Aleksandrovich Saukov, 1902-1964; obituary. Geol. rud. mestorozh.
7 no.1:124-125 Ja-F '65.

(MIRA 18:4)

SMORCHKOV, V.

Transformer for the "Dorozhnyi" receiver. Radio no.10:36 0 '57.
(MIRA 10:10)

(Electric transformers)

GAMIT, P. P., LEONTOVICH, A. M., SVIRIDENKOV, E. A., SOROKIN, V. N., CHETNIKOVA, Z.A.

"Radiation properties of a ruby crystal laser."

The kinetics of generation at room temperature and low temperature (down to -165C) and properties of radiation coherence in a ruby laser were investigated.

Report presented to the 11th Conference on Luminescence (Molecular luminescence and luminescence analysis) Minsk, 10-15 Sept. 1962.

SMORCHKOV, V.N.; NIKITINA, A.N.

Simplified photoelectric fluorimeter. Prib. i tekh. eksp. 8 no.3:192 My-Je '63. (MIRA 16:9)

1. Institut organicheskoy khimii AN SSSR.
(Fluorimeter)

GALANIN, M.D., KORBKIN, V.V., LEONTOVICH, A.M., SMORCHKCV, V.M.
AND CHIZHIKOVA, L.A.

Coherence, spectra time scanning and pulsations of the ruby laser emission.

Report submitted to the Third Intl. Symp. on Quantum Electronics.
Paris, France,   11-15 Feb 1963

GALANIN, M.D.; LEONTOVICH, A.M.; SVIRIDENKOV, Z.A.; SMORCHKOV, V.N.;
        CHIZHIKOVA, Z.A.

Pulsations in the radiation from an optical ruby maser. Opt. i spektr.
14 no.1:165-166 Ja '63.   (MIRA 16:5)
                (Masers)   (Quantum electronics)

L 60877-65   EWA(k)/FBD/EWG(r)/EWT(l)/EWP(e)/EWT(m)/EEC(k)-2/EWP(i)/T/
EEC(b)-2/EWP(k)/EWA(h)/EWA(m)-2 SCTB/IJP(c)   WG/WH

ACCESSION NR:' AP5019769

UR/0051/65/019/002/0296/0298
535.34+535.37:553.824

AUTHOR: Galanin, M. D.; Smorchkov, V. N.; Chizhikova, Z. A.

TITLE: Luminescence and absorption of excited ruby

SOURCE: Optika i spektroskopiya, v. 19, no. 2, 1965, 296-298

TOPIC TAGS: ruby, ruby crystal, optical pumping, population inversion, laser,
solid state laser, ruby laser

ABSTRACT: An investigation was made of the absorption and luminescence of optically
excited ruby crystals in order to determine whether absorption from the metastable
^2E levels decreases the lifetime of excited chromium ions and the effect of ab-
sorption on the degree of population inversion that can be achieved. The experi-
ments were conducted under conditions which made it possible to neglect stimulated
emission. Within the limit of the experimental error ($\sim$10%) it was established
that excitation from the ^2E level is followed by a quick nonradiative transition to
the same level and that the probability of transition to the ground state is small.
Therefore,, the effects responsible for a decrease in the inverted population are
most likely limited to spontaneous and stimulated emission. Orig. art. has: 3
formulas and 2 figures.   [CS]
Card 1/2

L 60877-65

ACCESSION NR: AP5019769   0

ASSOCIATION: none

SUBMITTED: 05Jan65   ENCL: 00   SUB CODE: SS

NO REF SOV: 002   OTHER: 002   ATD PRESS:4063

Card 2/2

L 25283-65   EWG(j)/EWA(k)/FBD/FWT(1)/FWP(e)/EWT(m)/EEC(k)-2/EEC(t)/T/EEC(b)-2/
EWP(k)/EWA(m)-2/EWA(h)   Pn-4/Po-4/Pf-4/Pi-4/Pl-4/Peb   IJP(c)   WG/WH
ACCESSION NR: AP5004378   S/0056/65/048/001/0087/0093

AUTHOR: Veduta, A. P.; Leontovich, A. M.; Smorchkov, V. N.

TITLE: Changes in a ruby laser resonator due to heating by the pumping source

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 1, 1965,
87-93

TOPIC TAGS: ruby laser, resonator distortion, gas laser interferometer, thermal
distortion, gas laser, ruby laser heating

ABSTRACT: An interferometric method was used to study the changes in the resonator
of a ruby laser caused by heating by the pumping source. An He-Ne gas laser with
emission at $\lambda = 6328$ Å was used as a coherent light source for the interferometer.
The gas laser beam, transformed into a parallel beam by means of lenses, was allowed
to pass through a semitransparent plate and to strike a pumped ruby at right angles.
The front end of the ruby was 65—85% transparent, the rear end silver coated. The
pattern set up by the interference of two beams reflected in the resonator was
photographed by means of an SFR-2M camera during the pumping of the ruby. The emis-
sion from the ruby laser and the scattered pumping radiation were eliminated by
filters for $\lambda = 6328$ Å. The ruby rods were 50 and (approximately) 74 mm long and
their lateral surfaces were polished. The pumping was by an IFK-15,000 lamp. The
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L 25283-65
ACCESSION NR: AP5004378

distribution, number, and shape of the interference bands varied during pumping, which indicates that the total optical length and shape of the resonator undergo considerable changes due to heating. The nonuniform heating is due to the focusing of the pumping light by the lateral surfaces of the ruby and the generation of internal modes in the ruby. Heating of the ruby rods was proportional to the concentration of chromium in the ruby. The energy absorbed by various ruby rods during pumping and the efficiency of the pumping source were calculated. The theoretical and experimental results varied by a factor of 1.5—2. The discrepancy has not yet been investigated, but it is suggested that it might be due to the absorption of light in the metastable state or to excitation of internal modes which reduce the laser power output and decrease the lifetimes in the excited state. Orig. art. has: 4 figures and 1 table. [YK]

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Institute of Physics, Academy of Sciences, SSSR)

SUBMITTED: 08Jun64   ENCL: 00   SUB CODE: EC

NO REF SOV: 009   OTHER: 004   ATD PRESS: 3184

DRORCHKOV, V.P.

Mastering the rated capacity of the mine ahead of time.
Ugol' 39 no.8:26-27 Ag '64.   (MIRA 17:10)

1. Nachal'nik shakhty "Sukhodol'skaya" No.1 tresta Krasnodonugol'.

SMORCHKOVA, G.A.

Immediate and late results of treating children with tuberculous
meningitis. Pat.,klin.i terap.tub. no.8:96-99 '58.

(MIRA 13:7)

(MENINGES--TUBERCULOSIS)

AUTHORS: Yesikov, S.E., Senior Scientific Worker, Candidate of Economic
             Sciences: Smorodkova, Ye.P., Candidate of Economic Sciences

TITLE: Analysis of Total Production Costs in Communication   (Analiz
             sebestoimosti produktsii svyazi)

PERIODICAL: Vestnik svyazi, 1958, Nr 12, pp 18-20 (USSR)

ABSTRACT: Referring to the article in Vestnik svyazi, 195?, Nr 7, deal-
             ing with calculation methods for determining the net operation
             costs of communication facilities, the author states that
             besides planning the net cost indexes, a permanent control
             of the results of the production and economic activity of the
             communication enterprises must be established. Analyses of
             net production costs is one of the most important means of
             control. The author explains the sequence in which such an
             analysis is to be performed and shows an analytical table with
             calculations of the net cost of one telegram which was com-
             piled from the data of one telegraph exchange (Figure 1).
             The expenditures are broken down in wages, materials and spare
             carts, electric power, amortization of equipment, other pro-
             duction expenditures, general expenditures, and sanctions.

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Analysis of Total Production Costs in Communication   SOV/111-58-12-20/46

The actual cost figures are then compared with the planned cost and the amount of money wasted or saved is established. In addition, the expenditures are given in percentages compared to the planned cost. Finally the degree of influence of the change of expenditures on the net cost is listed in percentages. The author then explains in detail which expenditures fall into the aforementioned categories. There are 3 tables.

ASSOCIATION: TsNIIS

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25(3)   SOV/111-59-8-15/30

AUTHORS: Podgorodetskiy, I.A., Docent, Srapionov, O.S., Chief,
                and Smorchkova, Ye.P., Senior Scientific Worker

TITLE: Determination of the Income of Communications Enter-
                prises on Cost Accounting

PERIODICAL: Vestnik svyazi, 1959, Nr 8, pp 17-19 (USSR)

ABSTRACT: In this article the authors deal with the problem of
                determining the income of enterprises operating on
                the cost accounting system, based on a study of the
                problem by the Laboratoriya ekonomiki svyazi TsNIIS
                (Laboratory of Communications Economics of the TsNIIS)
                in search of a single principle for determining income.
                The problem is presented generally in terms of income
                sources for communications enterprises generally, and
                value of production by the enterprise (in term of
                the monetary expression for the amount of socially
                necessary labor consumed in production), and the theo-
                retical basis for the solution laid. Basically, it
                is stated, if the income derived from charges made
Card 1/4   for services equals the monetary expression for the

SOV/111-59-8-15/30

Determination of the Income of Communications Enterprises on Cost
Accounting

value of production, this income may be considered
that income which belongs to the enterprise. The
authors propose a means of determining the income of
an enterprise on the basis of the correlation exist-
ing between income from tariffs and the income be-
longing to the enterprise which is established in the
plan, and outline this method. The correlation de-
scribed is found to be stable for most communica-
tions enterprises over a period of several years.
Several questions relating to the operation of an
enterprise on this method are dealt with, particular-
ly with regard to fulfillment of plans. The problem
of enterprises with incomes from tariffs lower than
the value of production is dealt with; according
the TsNIIS out of 419 communications offices (konto-
ra svyazi) only 13 are operating in this way. Treat-
ed also is the question of enterprises (e.g. the
LTU) without income from tariffs, and the question
of profit formation in such enterprises. The authors

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Determination of the Income of Communications Enterprises on Cost Accounting

then outline the system of determining income according to their method for different types of enterprises. This system is based on computations done at the Laboratory of Communications Economics, TsNIIS, with the aid of materials from 920 district (rayón) communications offices, 20 consolidated municipal enterprises, 20 post offices, 19 MTS , 26 GTS , 29 DRTS , 16 telegraph offices, 17 radio enterprises, 36 LTU , and 17 OPF . A check of the effectiveness of the proposed method was made using data from the Kiyev, Minsk, and Gor'kiy Communications Administrations: detailed comparative calculations of the results of plan fulfillment, and dynamics of growth were made by the proposed and existing methods of determining income. Conferences devoted to the new system, in which people from communications ministries and administrations, selected enterprises, and rayon communications offices took part, were held; a "positive attitude" to the method was shown. The

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SOV/111-59-8-15/30
Determination of the Income of Communications Enterprises on Cost
Accounting

            editors of "Vestnik svyazi" ask for comments from
            readers on the subject matter of this article.
            There is 1 table.

ASSOCIATION: Laboratoriya ekonomiki svyazi TsNNIISa (Laboratory
            of Communications Economics of the TsNIIS),
            TsNIIS

Card 4/4

MALKIN, Sergey Aleksandrovich; SMORCHKOVA, Ye.P., otv. red.; KAZ'MINA,
    R.A., red.; SLUTSKIN, A.A., tekhn. red.

[Analysis of the administrative operations of communication
enterprises] Analiz khoziaistvennoi deiatel'nosti pred-
priiatii sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi
i radio, 1961. 104 p.   (MIRA 14:9)
    (Communication and traffic—Accounting)

MALKIN, Sergey Aleksandrovich; SMORCHKOVA, Ye.P., otv. red.; KAZ'MINA, R.A., red.; SLUTSKIN, A.A., tekhn. red.

[Analysis of the economic activity of communication enterprises]
Analiz khoziaistvennoi deiatel'nosti predpriiatii sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1961. 106 p.
(MIRA 14:11)

(Telecommunication)

SRAPIONOV, Onik Sergeyevich; SMORCHKOVA, Yekaterina Pavlovna;
YESIKOV, S.R., otv. red.; EYDEL'MAN, B.I., red.;
ROMANOVA, S.F., tekhn. red.

[Business accounting in communication enterprises] Khoziai-
stvennyi raschet v khoziaistve sviazi. Moskva, Sviaz'izdat,
1963. 159 p.   (MIRA 16:5)
            (Telecommunication--Finance)

GOLOMB, Gerson Emmanuilovich; KOL'CHITSKIY, Mikhail L'vovich;
SMORCHKOVA, Yekaterina Pavlovna; SIDOROVA, T.S., red.;
TRISHINA, L.A., tekhn. red.

[Finance of the communication system] Finansy khoziaistva
sviazi. Moskva, Sviaz'izdat, 1963. 269 p. (MIRA 17:2)

YESIKOV, S.R., kand.ekonom.nauk; SMORCHKOVA, Ye.P., kand.ekonom.nauk

New nomenclature and monetary evaluation of telecommunication
services. Vest. sviazi 25 no.8:28-30 Ag '65.   (MIRA 18:10)

1. Nachal'niki laboratoriy TSentral'nogo nauchno-issledovatel'skogo
instituta svyazi Ministerstva svyazi SSSR, Moskva.

KRESHKOV, A.P.; MIKHAYLENKO, Yu.Ya.; SMORENKINA, I.P.

Ultraviolet spectrophotometric determination of naphthalene,
α -and β-chloronaphthalene [with summary in English]. Zhur.anal.
khim. 13 no.2:242-245 Mr-Ap '58.   (MIRA 11:4)

1.Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mende-
leyeva.
                (Naphthalene--Spectra)

LEVINA, K.S.; SMORGENSHTERN, I.

Organizing the detoxication of sewage from dwellings by means of chlorination plants. Med. zhur. Uzb. no.7:20-22 Jl '61.
(MIRA 15:1)

1. Iz Kokandskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(SEWAGE—PURIFICATION)   (WATER—PURIFICATION—CHLORINATION)

LEYKHTLING, K.A.; SMORGON, L.S., nauchnyy sotrudnik

Wear resistance of saws with bits. Trudy VSNIPILesdrev no.10:27-32 '64.

(MIRA 18:10)

1. Nachal'nik laboratorii stankov i instrumentov Vostochno-Sibirskogo nauchno-issledovatel'skogo i proyektnogo instituta lesnoy i derevoobrabatyvayushchey promyshlennosti (for Leykhtling).

LEYKHTLING, K.A.; SIMONON, L.S., nauchnyy sotrudnik

Experimental arrangement for circular saws with bits.
Trudy VNIIPImesdrev no.8:22-26 '63.   (MIRA 18:11)

SMORGONSKAYA-RYSS, V.L.

Methods of chemistry teaching in the schools of Great Britain.
Khim. v shkole 14 no.2:57-63 Mr-Ap '59.   (MIRA 12:4)
      (Great Britain--Chemistry--Study and teaching)

SMORGONSKAYA-RYSS, V.L.

Problem of training chemistry teachers in the United States. Khim.
v shkole 15 no.5:92-95 S-O '60.   (MIRA 13:10)

1. Pedagogicheskiy institut im.Lenina, Moskva.
        (United States--Chemistry--Study and teaching)
        (United States--Teachers, Training of)

SMORGONSKAYA-RYSS, V.L.

New in the teaching of chemistry in United States secondary schools.
Khim. v shkole 18 no.5:72-74 S-O '63.   (MIRA 17:1)

SMORGONSKIY, B.N.

A two-way telephone amplifier without differential systems
for rural communication networks. Avtom., telem. i sviaz'
6 no.6:39-41 Je '62.   (MIRA 15:7)

1. Nachal'nik laboratorii svyazi Moskovskoy dorogi.
                            (Telephone)

SMORGONSKIY, B.N.

Transformers for duplex amplifiers without differential systems.
Avtom., telem. i sviaz' 7 no.1:36 Ja '63.   (MIRA 16:2)

1. Nachal'nik laboratorii svyazi Moskovskoy dorogi.
   (Electric transformers)   (Telephone—Equipment and supplies)

SMORGONSKIY, V.I., inzh.

Use of semiconductor power rectifiers in the national economy.
Vest. elektroprom. 31 no.8:15-16 Ag '60.   (MIRA 15:5)
                    (Electric current rectifiers)
                        (Semiconductors)

BORISOV, M.A., inzh.; SMORGONSKIY, V.I., inzh.

Awarding of the participants of the Exhibition of Achievements
of the National Economy of the U.S.S.R. Vest. elektroprom. 34
no.1:36-38 Ja '63.   (MIRA 16:1)
 (Moscow--Exhibitions) (Electric equipment industries)

BOROVITSKIY, V.N.; SMORGONSKIY, V.I., inzhener-metodist

Thematic display "Low-voltage commutation apparatus units."
Vest. elektroprom. 34 no.2:77 F '63.   (MIRA 16:2)

1. Direktor pavil'ona "Elektrifikatsiya SSSR" na Vystavke
dostizheniy narodnogo khozyaystva (for Borovitskiy).
                    (Electric switchgear)
                    (Commutation (Electricity))

SMORGONSKIY, V. Ya.
UHR Electronics - Wave Propagation   FD-253?

Card 1/1   Pub. 90 - 4/12

Author   :   Khorgonskiy, V. Ya., Active Member, VNORiE

Title   :   Calculation of Phase and Group Velocities of Surface Waves

Periodical :   Radiotekhnika, 10, 25-3?, May 55

Abstract   :   A method is examined for constructing the phase-velocity frequency
                characteristic of surface waves. The obtained characteristics ap-
                proximate power functions, which makes it possible to calculate the
                group velocity frequency characteristic and thus to obtain data on
                the band properties of given high frequency surface waves for the
                transmission of electrical energy. Graphs, table. Two ref-
                erences: US, Germany.

Institution :   All-Union Scientific and Technical Society of Radio Engineering
                and Electric Communications im. ... Popov (VNORiE)

Submitted   :   November 18, 1954

9(9)   PHASE I BOOK EXPLOITATION   SOV/2739

.Smorgonskiy, Vladimir Yakovlevich, Candidate of Technical Sciences

Osnovy tekhniki ul'trakorotkikh voln; kurs lektsiy (Fundamentals of Ultrashort
    Wave Engineering; Course of Lectures) [Gor'kiy] Gor'kovskoye knizhnoye
    izd-vo, 1957. 88 p. Errata slip inserted. 500 copies printed.

Sponsoring Agency: Gor'kovskiy politekhnicheskiy institut.

Ed.: A. D. Ponomarenko; Tech. Ed.: L. I. Nemchenko.

PURPOSE: This booklet is intended for senior students of radio-engineering
    departments of vuzes.

COVERAGE: The author discusses methods of calculating waveguide excitation
    and presents examples of calculating input impedance of antennas placed in a
    waveguide. He also calculates equivalent parameters of some waveguide ir-
    regularities and discusses free and forced oscillations in hollow resonators.

Card 1/3

Fundamentals of Ultrashort Wave (Cont.)   NOV 759

AVAILABLE: Library of Congress (TK7872.W3 S5)

Card 3/3

JP/fal
12 15/59

AUTHOR: Smorgonskiy, V. Ya.,

TITLE: Author' **Abstract** (Avtoreferat)' **Effect** of small deformations
of the Cross Section Upon the Performance of Wave Guides
(Vliyaniye malykh deformatsiy poperechnogo secheniya na rezhim
raboty volnovoda)

PERIODICAL: Radiotekhnika, 1958, Vol. 13, Nr ., pr. 65-70 (USSR)

ABSTRACT: The performance of a wave guide is determined by its geometrical
dimensions and by the quantity p which is specified below. De-
viations from these dimensions are usually accompanied by a
modification of the cross-sectional shape. From the critical
wave numbers (which are known) of a not-deformed wave guide it
is possible to find the critical wave numbers for a deformed
wave guide. Formula (2) for the admissibility and formula (3)
for the attenuation factor α for the wave H_{oi} in a rectangular

wave guide are written down. From these formulae the equations
specifying the relative admissibility and the attenuation can
be deduced for the case that the deformations are not too great:
Formula (4) and (5). These formulae permit to compute the de-

Card 1/2

Author's **Abstract.** **Effect** of Small Deformations of the Cross Section Upon the Performance of Wave Guides

viations of the cross section, that is to say the admissible deviations. $p = \dfrac{\omega_{kr}}{\omega} = \dfrac{\lambda K}{2\pi}$, where ω_{kr} denotes the critical frequency and K the critical wave number which is determined by the dimensions and the shape of the cross section. There are 4 figures and 1 reference, 1 of which is Soviet.

SUBMITTED: October 26, 1957 (the paper) and April 25, 1958, the author's abstract

9 (2, 9)

AUTHOR: Smorgonskiy, V.Ya.

TITLE: The Calculation of the Input Impedance of a Vibrator
              Placed Along an Elliptical Waveguide

                                                    06360
                                                    SOV/142-2-4-13/26

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika,
              1959, Vol 2, Nr 4, pp 480-485 (USSR)

ABSTRACT: The author presents formulas and graphs calculating the
              input impedance of a vibrator placed along an ellipti-
              cal waveguide. They may be used for determining the
              change of the input impedance when a round waveguide
              is deformed to an elliptical one, which is of great im-
              portance for determining eccentricity tolerances. The
              calculation method is based on a general expression sug-
              gested by L.A. Vaynshteyn /Ref 1/ for the input impedan-
              ce of a vibrator placed into a waveguide. The author
              presents the following formula for the active component
              of the input impedance of a thin vibrator placed along
              a semi-infinite waveguide

Card 1/3

06360
SOV/142-2-4-13/26

The Calculation of the Input Impedance of a Vibrator Placed Along
an Elliptical Waveguide

> are 8 graphs, 1 diagram, 3 references, 2 of which are
> Soviet and 1 English.

SUBMITTED: December 17, 1958 (November 22, 1958)

Card 3/3

SOV/109-59-4-2-23/27

AUTHOR: Smorgonskiy, V.Ya.

TITLE: The Field Structure of the eE_{01}-Wave in an Elliptical
             Waveguide (K voprosu o strukture polya volny eE_{01} v
             ellipticheskom volnovode)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 2,
            pp 335-337 (USSR)

ABSTRACT: In a number of text-books dealing with the theory of
            the U.H.F., the structure of the waves of the types
            eE_{01} and eH_{01} in the transverse cross-sections of an
            elliptical waveguide is represented by the figures taken
            from a work by L.Chu (see Ref 6). The field structures
            are as shown in Fig 1. By examining the eigen-functions
            of the waves, as expressed by the first two equations on
            p 335, it is shown that the figures given by L.Chu are
            incorrect. In particular, it is found that the structure
            of the magnetic field for eE_{01}-wave, for the
            eccentricity e = 0.74, is in the form shown in Fig 4.

Card 1/2

SOV/109-59-4-2-23/27

The Field Structure of the eE_{01}-Wave in an Elliptical Waveguide

There are 4 figures and 11 references of which 7 are Soviet and 4 English; three of the Soviet references being translated from English.

SUBMITTED: 28th March 1958

Card 2/2

29312

S/109/61/006/010/010/027
D266/D302

q, 1300

AUTHOR: Smorgonskiy, V.Ya.

TITLE: Determining the cut-off frequency of higher order
             modes in waveguides of elliptic cross-section

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 10, 1961,
             1665 - 1666

TEXT: The author's purpose is to calculate the influence of eccen-
tricity on the cut-off frequency of higher order modes. The corres-
ponding solution of Maxwell's equation in confocal elliptic coordi-
nates is known, the eigenfunction consists of certain linear combi-
nations of Mathieu functions of the first and second kind. The au-
thor takes the expression of the eigenfunction from the work of J.
Wong (Ref. 3: Canad. J. Phys., 1956, 34, 4, 354) and writes up
witho any derivation the characteristic equations both for TM and
TE modes. The cut-off frequencies of arbitrary modes can be calcu-
lated from these implicit relationships but the author restricts
the numerical solution to the $_eH_{11}$, $_oH_{11}$ and E_{01} modes. The actual

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Determining the cut-off ...

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S/109/61/006/010/010/027
D266/D302

solution is obtained by expanding the radial Mathieu functions into a quickly converging series of cylindrical functions. The results are presented in a Figure, where the cut-off frequency of the above-mentioned modes is plotted against $e_2 = a_1/a_2$ ($2a_1$ and $2a_2$ are the large and small axes of the ellipse comprising the outer conductor) for three values of the parameter k (specifying the inner conductor). It is shown that if $e_2 < 0.1$ the change in cut-off frequency is less than 1 %. There is, however, considerable change if $e_2 > 0.2$. There are 1 figure and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: S. Mahaparta, Electronic and Radio Engr., 1958, 35, 2, 63; J. Wong, Canad. J. Phys., 1956, 34, 4, 354; Tables relating to Mathieu functions, Cambridge University Press, N.Y. 1951.

SUBMITTED: December 1, 1960

Card 2/3

S/108/61/016/004/005/006
B107/B212

9.1300 (also 1130)

AUTHOR:.   Smorgonskiy, V. Ya., Member of the Society (see Association)

TITLE: Transmissivity of an elliptic waveguide for an E_{01} wave

PERIODICAL: Radiotekhnika, v. 16, no. 4, 1961, 67-69

TEXT: Here, $C_p = P_x/E_m^2$ is called the transmissivity of a waveguide, where P_x is the power transferred, and E_m the electric field strength. Introducing an elliptic coordinate system (Fig. 1) and if the x-axis coincides with that of the waveguide, the following expression is obtained: $E_m^2 = E_{xm}^2 + E_{\eta m}^2 + E_{\xi m}^2$, where E_{xm}, $E_{\eta m}$, $E_{\xi m}$ denote the maximum values of the corresponding components of the electric field. The longitudinal component E_{xm} and the transverse component $E_{trans\ m} = \sqrt{E_{\eta m}^2 + E_{\xi m}^2}$ are shifted by $90°$ with respect to time, and besides, $E_{\eta m}$ and $E_{\xi m}$ are separated in space (Ref. 1); therefore, it is sufficient for the calculation of the

Card 1/6

Transmissivity of an...

electric strength to find the relations $y_\eta = E_{\eta m}/E_{xm}$ and $y_\xi = E_{\xi m}/E_{xm}$. If y_η and $y_\xi < 1$, then it is assumed that $E_m = E_{xm}$, but if y_η and $y_\xi > 1$, then it is assumed for $y_\xi > y_\eta$ that $E_m = E_{\xi m}$; for $y_\eta > y_\xi$, however, $E_m = E_{\eta m}$.
Now, the equations for the components of the electric field in an elliptic waveguide for a wave E_{01} may be written as follows:

$$E_x = A\varkappa^2 Ce_0(\xi, q)\, ce_0(\eta, q)$$
$$E_\xi = \frac{A\beta}{P} C'e_0(\xi, q) ce_0(\eta, q)$$ (1)
$$E_\eta = A\frac{\beta}{P} Ce_0(\xi, q) ce'_0(\eta, q)$$

where A denotes an arbitrary constant, $\varkappa = 2\pi/\lambda_{cr}$ the critical wave number; $\beta = 2\pi/\lambda\sqrt{1-h^2}$; $h = \omega_{cr}/\omega$ is the phase constant; $ce_0(\eta, q)$ and $Ce_0(\xi, q)$ are a trigonometric function and the modified Mathieu functions. The notation of the Mathieu functions are those commonly used in literature; $P = ae\sqrt{ch^2\xi - \cos^2\eta}$ denotes the Lamé coefficient for the elliptic coordinate system, a the semimajor axis, e the eccentricity of the waveguide cross section, q a parameter determined by the following boundary conditions: The coordinate of the ellipse, which corresponds to the

Card 2/6

Transmissivity of an...

waveguide surface ξ_o = Ar ch $1/e$, has to be the first root of the modified Mathieu function of zero order. Thus, the author obtained the following expression: $E_{xm} = A x^2 Ce_o(0,q) ce_o(90^o,q)$. Calculating $\left(\dfrac{\partial E_{\eta}}{\partial \eta}\right)_{\xi = \xi_o}$ and $\left(\dfrac{\partial E_{\xi}}{\partial \xi}\right)_{\eta = 90^o}$, and determining $E_{\eta m}$ and $E_{\xi m}$ yields:

$$y_\eta = \frac{E_{\eta\mu}}{E_{x\mu}} = \frac{1,32\,(A_2 + 4A_4)}{ce_0(90^o,\,q) + q},\tag{4a}$$

$$y_\xi = \frac{E_{\xi\mu}}{E_{x\mu}} = \frac{0,65\,\mathrm{th}\,\xi_{xp}\left[-A_0 J_1\left(\sqrt{2q}\,\mathrm{ch}\,\xi_{x\eta}\right) + A_2 J_2'\left(\sqrt{2q}\,\mathrm{ch}\,\xi_{xp}\right) + A_4 J_4'\left(\sqrt{2q}\,\mathrm{ch}\,\xi_{xp}\right)\right]}{Ce_0(0,\,q)}.\tag{46}$$

where ξ_{cr} is the value of ξ corresponding to the first maximum of $C'e_o(\xi,q)$. Diagrams are given for the computation of q, $Ce_o(0,q)$, $ce_o(90^o,q)$, y_η, y_ξ, and ξ_{cr}. Since for $e < 0.65$ y_η and also $y_\xi < 1$, the transmissivity can be determined from

Card 3/6

S/106/61/010/004/005/006
B107/B212

Transmissivity of an...

$$C_p = \frac{P_x}{E_{x,u}^2} = \frac{0.052\, a^4 N \sqrt{1-h^2}}{\lambda^2\, (\kappa a)^4\, [Ce_0\,(0,\,q)\, ce_0\,(90^\circ,\,q)]^2}.$$ (5)

$$N = \int_0^{2\pi} \int_0^{\xi_0} \{[C'e_0\,(\xi,\,q)\, ce_0\,(\eta,\,q)]^2 + [Ce_0\,(\xi,\,q)\, ce_0'\,(\eta,\,q)]^2\}\, d\xi\, d\eta.$$

In a previous paper of the author (Ref. 5: V. Ya. Smorgonskiy. Izvestiya vysshikh uchebnykh zavedeniy MVO SSSR po razdela "Radiotekhnika", no. 4, 1959) it is shown that N is a function of eccentricity. Using Eq. (5) it is possible to explain the change of transmissivity if a circular waveguide is deformed into an elliptic one. For quantitative

calculations $y_3 = C_p/C_{po}$ is introduced, where $C_{po} = \dfrac{77 \cdot 10^{-4}}{\lambda^2}\sqrt{1-h^2}$

denotes the transmissivity of a circular waveguide having a radius r_o for a wave E_{01}. The quantities N, κa, and $Ce_o(0,q)ce_o(90^\circ,q)$ are functions of eccentricity; Fig. 4 shows it for N and κa. From Fig. 4 it can be seen that κa and, therefore, h will change only slowly for $e < 0.65$. If the <u>area of the cross section</u> remains constant during deformation, i.e.,

Card 4/6

Transmissivity of an...

$a = r_0/\sqrt[4]{1 - e^2}$, then $y_{\ni_2} = y_{\ni_1}/(1 - e^2)$. If the arc length remains

constant during deformation, i.e., $r_0 \approx a(1 - e^2/4)$, then the following

expression is obtained: $y_{\ni_3} = y_{\ni_1}/(1 - e^2/4)^4$. For $e < 0.65$ the ex-

pression $(1 - e^2/4)^4 \approx 1 - e^2$ is valid, and one may set $y_{\ni_2} \approx y_{\ni_3}$. Fig. 5

gives the dependence of $y_{\ni_1}$ and $y_{\ni_2}$ on eccentricity for $h_0 = 0.83$; here,

the relation $\Delta h/h_0 = (\lambda a/2.4) - 1$ has been used. Fig. 5 shows that trans-
missivity will increase for $e > 0.4$. It drops faster with increasing
eccentricity if the area of the cross section decreases during deforma-
tion. There are 5 figures and 5 references: 4 Soviet-bloc and 1 non-
Soviet-bloc.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektro-
svyazi im. A.S.Popova (Scientific and Technical Society of
Radio Engineering and Electrical Communications imeni
A. S. Popov)

Card 5/6

44188

S/109/62/007/012/003/021
D266/D308

AUTHOR: Smorgonskiy, V. Yu.

TITLE: E_{01} wave in a coaxial cable with elliptic conductors

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 12, 1962,
            2003-2006

TEXT: The outer and inner conductors are confocal ellipses. The
author quotes the formula for the eigenfunction ψ of the E_{01} wave
from one of his earlier papers (Radiotekhnika i elektronika, v. 6,
no. 10, 1961, 1665). Calculating the lines of force it is conclu-
ded that the distribution of the electric and magnetic intensities
is appreciably different from that for a circular cross-section.
When the inequality

$$c > |F_M(h, \xi)|$$

L
n
a.

SU

Card 1/2

S/0109/64/009/001/0108/0113

ACCESSION NR: AP4009981

AUTHOR: Smorgonskiy, V. Ya.

TITLE: Determination of modes in a coaxial cable with elliptic conductors

SOURCE: Radiotekhnika i elektronika, v. 9, no. 1, 1964, 108-113

TOPIC TAGS: cable, coaxial cable, elliptic conductor coaxial cable, coaxial cable mode, coaxial cable wave propagation

ABSTRACT: The effect of the parameter $h = a_1 e_1 \omega_{cr} \sqrt{\varepsilon \mu}$ upon the first root of a transcendental equation describing the natural frequencies of an elliptic-conductor coaxial cable is considered. Here, a_1 is the ellipse major semiaxis, $e_1 = 1/\mathrm{ch}\, \xi_1$ where ξ_1 is an ellipse coordinate; see author's article in Radiotekhnika i elektronika, 1961, 6, 10, 1665. It is proven that the mode determination will be unambiguous with any h if the mode is determined by the field structure corresponding to the ordinal number of the root of the transcendental

Card 1/2

ACCESSION NR: AP4009981

level at $0 \leq h \leq h_1$. The method ensures a continuous transition to the circular-cylinder case. Orig. art. has: 5 figures, 14 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 22Dec62   DATE ACQ: 10Feb64   ENCL: 00

SUB CODE: CO   NO REF SOV: 001   OTHER: 003

Card 2/2

MARKOVITS, V.Ya., KOVNER, A.I.

carrying capacity of an elliptical waveguide operating in the
H₁₁ mode. Radiotekh. i elektron. 10 no.5:945-947 My '65.   (MIRA 18:6)

L 36200-66

ACC NR: AP6011457   SOURCE CODE: UR/0109/66/011/004/0752/0754

AUTHOR: Smorgonskiy, V. Ya.; Kovshov, A. I.

ORG: none

TITLE: Critical conditions in a circular waveguide with dielectric bushing

SOURCE: Radiotekhnika i elektronika, v. 11, no. 4, 1966, 752-754

TOPIC TAGS: waveguide, circular waveguide, dielectric waveguide

ABSTRACT: Several papers have been devoted to the analysis of critical conditions in a circular waveguide with dielectric bushing; they have considered either symmetrical modes or thin bushings (e.g., H. Unger, BSTJ, 1962). The present article analyses the critical conditions with asymmetrical modes and arbitrary bushing thickness. A dispersion equation is set up, and critical frequencies (calculated on a "Minsk-1" digital computer) for three principal

Card 1/2   UDC: 621.372.853.1.09

L 36200-66

ACC NR: AP6011457

modes are shown as curves for different values of dielectric constant. The results are compared with those obtained (e.g., by R. Waldron, J. Brit. IRE, 1963, v. 25, no. 6, 547) for a waveguide with a dielectric rod. It is found that the critical conditions in the bushing-type waveguide are similar to those in an ordinary or slightly-loaded waveguide. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 09 / SUBM DATE: 28Jun65 / ORIG REF: 003 / OTH REF: 007

Card 2/2

MAZURMOVICH, B.E., otv. red.; BOSHKO, G.V., red.; GUSHCHA, G.I.,
       red.; SEKORGORZHEVSKAYA, L.A., red.; FEDORENKO, I.A.,
       red.; ANDRIYCHUK, M.D., red.; KAS'YAN, S.E., red.

[Parasites and parasitoses in man and animals] Parazity
i parazitozy cheloveka i zhivotnykh. Kiev, Naukova dumka,
1965. 411 p.   (MIRA 18:9)

1. Akademiya nauk URSR, Kiev. 2. Kiyevskiy gosudarstvennyy
universitet (for Mazurmovich). 3. Institut zoologii AN Ukr.SSR
(for Boshko).

MASLOV, V.Ye., kand.tekhn.nauk; SAL'KOV, P.G., kand.tekhn.nauk; PROTSAYLO, M.Ya., inzh.; SMORGUNOV, M.P., inzh.; KROTOV, V.I., inzh.; OSTROMOV, A.M., inzh.; SHESTAKOV, V.M., inzh.

Experience in burning brown coals in wet-bottom furnaces with shaft-type impact mills. Teploenergetika 10 no.2:15-19 F '63.   (MIRA 16:2)

1. Vostochnyy filial Vsesoyuznogo teplotekhnicheskogo instituta, Chelyabinsk, Krasnoyarskenergo i Vsesoyuznyy nauchno-issledovatel'skiy teplotekhnicheskiy institut.
    (Boilers)   (Furnaces)   (Lignite)

TSIPARIS, I.N.; SMORIGAYTE, N.Yu. [Smorigaite, N.]

Evaluating the effect of salting-out by electrolytes. Izv. vys.
ucheb. zav.; khim. i khim. tekh. 6 no.3:405-407 '63.
(MIRA 16:8)

1. Litovskaya sel'skokhozyaystvennaya akademiya, kafedra khimii.
(Salting-out)   (Electrolytes)

PULLOT, L.P. [Clparis, .]; SPARIGAYTE, K.Yu.; [Sparigaite, K.]

Liquid-vapor equilibrium in the systems acetic acid-water and acetic acid-water-salt under isothermic 40 and 60° and isobaric conditions at 760 millimeters of the mercury column. Zhur. ob khim. 34 no.11:3544-3548 N '64.   (MIRA 18:1)

1. Litovskaya sel'skokhozyaystvennaya akademiya.

SMORIGAYTE, N.Yu., dotsent

Symposium on the problem of salting-out – salting-in of
liquids from solutions. Zhur. VKHO 8 no.5:573-574 '63.
(MIRA 17:1)

TSIPARIS, I.N.[Ciparis, I.]; SMORIGAYTE, N.Yu.[Smorigaite, N.];
    BRAZAUSKENE, D.I.[Brazauskiene, D.]

Physicochemical investigation of saturated solutions of salts
in mixtures of water and carboxylic acids. Ukr. khim. zhur.
29 no.2:142-149 '63.
                                (MIRA 16:6)

1. Litovskaya sel'skokhozyaystvennaya akademiya.
            (Salts)   (Solution(Chemistry))

RUMANIA/Chemical Technology - Cellulose and Its Derivatives.   H-33
              Paper.

Abs Jour   : Ref Zhur - Khimiya, No 24, 1958, 83836

Author   : Bodeanu, M., Smorjevschi, M.

Inst   : An. Inst. cercetari.

Title   : An Investigation on the Application of Pest in the Produc-
              tion of Grey Cardboard.

Orig Pub   : An. Inst. cercetari si experim, ind. lenin. si hirt., 1953,
              No 13, 225-239.

Abstract   : The results are given of the experiments carried out in
              connection with the production of grey cardboard from
              waste paper pulp and peat used in various ratios. The
              fiber yield from peat was from 66-73%. A cardboard sam-
              ple prepared from a blend of 70% of waste paper pulp and

Card 1/2

SMORJEVSCHI, M.

HUNG.

CH

/Manufacture of aliphatic ketones by catalytic dehydro-
genation of secondary alcohols. Al. Huch, G. Tranda-
firescu, Al. Nicolau, M. Smorievschi, and E. Cristea.
Rev. chim. (Bucharest) 6, 491-6(1954).—Secondary alcs.
from cracking gases were dehydrogenated in a Na$_2$SiO$_3$-
lined steel reactor to give 96–7% yields of Me$_2$CO and
MeCOEt; a pelletized, dried, and calcined mixt. of ZnO
contg. 10% aq. Na$_2$SiO$_3$ serves as catalyst. Thermo-
dynamic data, kinetics, and a flow sheet of an industrial
installation are given.   Gerard Anlzger

GANDEL', Ya. A.= "Some problems of local automation." Khar'kov State
U. imeni A. V. Gor'kov. Khar'kov, 1956. (Dissertation for the Degree
of Candidate in Physicomathematical Sciences).

SO: Knizhnaya Letopis' No. 21, 1956

AUTHOR: SMORKACHEV, E.T.

TITLE: On Local Nomography. (O lokal'nom nomografirovanii, Russian)   PA - 3038

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 762-765 (U.S.S.R.)

Received: 6 / 1957

Reviewed: 7 / 1957

ABSTRACT: The present paper is intended to adapt the local theory of nomography to the investigations concerning the possibility of representing a function by a nomograph. The author achieves this aim by formulating the theorems by M.A.KREYNES and N.D.AYZENSTAT. First, the nomographic invariant of the function which is sufficiently smooth in the domain G of the plane xOy is defined. (The partial derivatives f_x and f_y are not to vanish in G). Four of the lammata and 6 theorems are given and proved. There follow some theorems:

Theorem 1: The function $z = f(x,y)$, which is investigated here, is differentiatable in the neighborhood of any point of the domain G down to small values of the 6th order. It can be represented nomographycally in the neighborhood of any non-singular point of this domain down to the lowest values of the 7th order.

Theorem 2: deals with the nomographic invariance of the coefficients a_{ik} of a certain function which is given in this paper.

Theorem 3: The development coefficients in the columns of the local MASSO (?) determinant are expressed in a nomographically invariant

Card 1/2

AUTHOR: Smorkachev, E.T.   20-119-5-10/59

TITLE: Some Kinds of Local Nomograms (Nekotoryye vidy lokal'nykh
              nomogramm)
                          SSSR
PERIODICAL: Doklady Akademii Nauk, 1958, Vol 119, Nr 5, pp 880-883 (USSR)

ABSTRACT: The present paper continues the earlier investigations of the
              author [Ref 3]. The author considers nomograms with a straight-
              line scale and nomograms of Clark for the function $z = f(x,y)$
              for an exactness up to   terms of sixth order. Four theorems
              are proved, e.g.:
              Theorem: Let the function $z = f(x,y)$ be sufficiently smooth in
              the point (x_0, y_0), let $f'_x(x_0, y_0) \neq 0$, $f'_y(x_0, y_0) \neq 0$, $P(x_0, y_0) \neq 0$,
              where $P(x,y)$ is the nomographic invariant of Saint-Robert. Then
              $z = f(x,y)$ in the neighborhood of (x_0, y_0) can be represented

              with an exactness up to   terms of sixth order by a nomogram
              with a straight-line x- or y-scale.
              There are 3 Soviet references.

ASSOCIATION: Khabarovskiy gosudarstvennyy pedagogicheskiy institut (Khabarovsk
              State Pedagogic Institute)

PRESENTED: November 30, 1957, by A.N.Kolmogorov, Academician

SUBMITTED: November 29, 1957

Card 1/1

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The Plotting of Local Nomographs Without Recalibration SOV/20-129-3-11/70

coefficients of the terms up to the 5-th order inclusively
are put equal to zero.
There are 3 Soviet references.

ASSOCIATION: Armavirskiy gosudarstvennyy pedagogicheskiy institut
(Armavir State Pedagogical Institute)

PRESENTED: May 18, 1959, by A.N.Kolmogorov, Academician

SUBMITTED: May 18, 1959

Card 2/2

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16(1)
AUTHOR: Smorkachev, Ye.T.   SOV/20-129-6-12/69

TITLE: The Plotting of Local Nomographs Without Permissible Trans-
             formations

PERIODICAL: Doklady Akademii nauk SSSR,1959,Vol 129,Nr 6,pp 1242-1245(USSR)

ABSTRACT: The paper is a completion to the preceding publication of the
             author $\int$ Ref 1 $\int$. He gives very long formulas for the last
             grbup of the coefficients of the local determinant $\Delta(x,y,z)$
             by which the plotting of local nomographs of the function
             $z = f(x,y)$ up to the magnitudes of 6th order can be carried
             out.
             There is 1 Soviet reference.

ASSOCIATION: Armavirskiy gosudarstvennyy pedagogicheskiy institut (Armavir
             State Pedagogical Institute)

PRESENTED: May 18, 1959, by A.N. Kolmogorov, Academician

SUBMITTED: May 18, 1959

Card 1/1

SMORKALOV, A.F., inzhener.

Possible ways of making hydraulic transportation of soil by pressure cheaper.
Gidr.stroi. 22 no.7:42-43 Jl '53.   (MLRA 6:7)
                                                  (Hydraulic engineering)

SMORKALOV, A. F.

USSR/ Engineering – Damps

Card 1/1   : Pub. 71 – 7/17

Authors   : Smorkalov, A. F.

Title   : Reinforcing dam banks of ground works with alluvium

Periodical   : Mech. trud. rab. 5, 24–25, July 1954

Abstract   : A report concerning methods adopted in 1952–1953, by the Grozno Directorate of "Gidromekhaniztsiya" Combine, for reinforcing dam banks with alluvial soil, is presented. The thickness of the alluvial layer is calculated, and the rate of soil deposition is given. Drawings.

Institution :   .....

Submitted   :   .....

PEVZNER, A.I., inzh.; SMORKALOV, A.F., inzh.

Constructing hydraulic fill dams without reinforcing slopes. Nov.tekh.
mont. i spets.rab. v stroi. 21 no.3:19-23 Mr '59.   (MIRA 12:3)

1. Glavspetspromstroy Ministerstva stroitel'stva RSFSR, UNR-319 tresta
Gidromekhanizatsiya.
                    (Dams)

SMORKALOV, A.F., inzh.

Hydraulic fill on one side of a dam, Gidr. stroi. 33 no.5:
16-19 My '63.   (MIRA 16:5)
          (Dams--Design and construction)

SMOROD, S. R.

KORSUNSKIY, I.M.; SMOROD, S.R.

Rolling thin steel strips without intermediate annealing. Prom.
energ. 12 no.7:22-23 Jl '57.   (MLRA 10:8)
                        (Steel--Heat treatment)

KAYNARSKIY, I.S.; DEGTYAREVA, E.V.; PINDRIK, B. Ye.; KUKHTENKO, V.A.;
     KULAKOV, N.I.; BEL'CHENKO, B.I.; IVNITSKAYA, N.S.; SMORODA, I.M.;
     SHAROV, M.F.; KOZIN, L.M.; KVASHA, A.S.;PELESHCHUK, M.I.; PRYAKHIN,
     L.G.; LEVINA, L.I.; DANILOV, V.I.; DIDENKO, S.Yu. PROTSENKO, G.A.

Reducing dust formation from dinas bricks and dinas mortar.
Ogneupory 29 no.3:109-112 '64   (MIRA 17:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov
(for Kaynarskiy, Degtyareva, Pindrik, Kukhtenko). 2. Gosudar-
stvennyy institut po proyektirovaniyu predpriyatiy koksokhi-
micheskoy promyshlennosti (for Kulakov,Bel'chenko, Ivnitskaya).
3. Vsesoyuznyy trest po stroitel'stvu i montazhu koksokhimi-
cheskikh zavodov (for Peleshchuk, Pryakhin, Levina). 4. Ukrain-
skiy nauchno-issledovatel'skiy institut gigiyeny truda i pro-
fessional'nykh zabolevaniy (for Danilov, Didenko, Protsenko).

SMORKALOV, V.T., red.; KARDASH, F.G., st. varshchik, red.;
IVANOVA, V.Ya., red.; SUDAKOVA, Yu., red.; VASIL'KOVICH,
L.A., red.; GETLING, Yu., red.

[Plant of miraculous transformations; everyday work of
the employees of the Tavda Hydrolysis Plant] Zavod chu-
desnykh prevrashchenii; trudovye budni kollektiva Tavdin-
skogo gidroliznogo zavoda. Sverdlovsk, Sredne-Ural'skoe
knizhnoe izd-vo, 1964. 50 p.   (MIRA 18:4)

1. Direktor Tavdinskogo gidroliznogo zavoda, Ural (for
Kardash). 2. Predsed. zavodskogo komiteta Tavdinskogo
gidroliznogo zavoda, Ural (for Ivanova). 3. Sekretar'
Vsesoyuznogo Leninskogo Kommunisticheskogo soyuza molodezhi
(for Sudakova). 4. Nachal'nik planovogo otdela Tavdinskogo
gidroliznogo zavoda, Ural (for Vasil'kovich).

SMORODA, I.M., inzhener.

New construction of coke ovens. Koks i khim. no.4:59-61 '56.
(MIRA 9:9)

1.Koksokhimmontazh.
(Coke ovens)

SMORODA, I.M., izhener.

Mechanizing the masonry work in building coke furnaces. Stroi.prom.
34 no.4:12-15 Ap '56.   (MLRA 9:8)
(Coke ovens)