

AL'TSHULER, V.S.; SHAFIR, G.S.

Kinetics of the interaction of carbon with steam at pressures up
to 100 atm. Trudy IGI 16:227-236 '61. (MIRA 16:7)
(Carbon) (Steam)

KLIRIKOV, G.V.; AL'TSHULER, V.S.

Effect of a blast-gas mixture and of catalysts on the course of
reduction reactions in gas generator processes. Trudy IGI 16:
237-247 '61. (MIRA 16:7)
(Gas producers)

^{S.}
AL'TSHULER, V.; PETRENKO, I.G.

[^]
Kinetics of the interaction between gases and carbon; comments on
P.A.Tesner's article. Gaz.prom. 6 no.2:48-49 '61. (MIRA 14:4)

(Gases) (Carbon) (Tesner, P.A.)

S/081/62/000/015/009/038
B168/B101

AUTHORS: Fridland, M. I., Sechenov, G. P., Al'tshuler, V. S.

TITLE: An investigation into the influence of pressure on the carry-over of fine particles from "pseudoliquid" layer systems

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1962, 317 - 318, abstract 15I82 (Tr. In-ta goryuchikh iskopayemykh. AN SSSR, v. 16, 1961, 204 - 210)

TEXT: The investigation was conducted at the IGI installation of the AS USSR, using its reaction vessel 500 mm high and of 40 mm inside diameter, made of organic glass and designed to operate at a pressure of up to 20 atm without heating. The torch-type distribution lattice had a free cross-section of 5.2%. A microspherical aluminosilicate catalyst with a true specific gravity of 1.879-2.35 g/cm³ and a particle size of 24-1000 μ was used as solid phase. Nitrogen at a flow rate of 10-210 nl/min. was used as pseudofluidizing gas. It was established that at a constant degree of expansion of the pseudoliquid layer, and with other conditions constant, an increase of pressure results in a substantial reduction in carryover; also Card 1/2

An investigation into ...

S/081/62/000/015/009/038
B168/B101

that this substantially increases the ratio of volume flow of gas to magnitude of particle carryover, which in turn makes it possible to increase substantially the specific intensity of systems with a pseudoliquid layer. The favourable effect of an increase in pressure upon pseudoliquidation conditions was confirmed. [Abstracter's note: Complete translation.]

Card 2/2

AL'TSHULER, V.S.; KANAVETS, P.I.; GAVRILOVA, A.A.

Investigating kinetics of the reduction of ore-fuel
granules. Trudy IGI 22:50-56 '63. (MIRA 16:11)

SHEVTSOV, V.P.; SHAFIR, G.S.; KLIRIKOV, G.V.; AL'TSHULER, V.S.

Simultaneous reaction of carbon dioxide and steam with carbon
at normal and elevated pressures. Trudy IGI 16:164-170 '61.
(MIRA 16:7)

(Carbon) (Steam) (Chemical reaction, Rate of)

AL'TSHULER, V.S.; SHAFIR, G.S.

Simultaneous conversion of methane and tar vapors under high pressure.
Trudy IGI 16:36-45 '61. (MIRA 16:7)
(Methane) (Coal-tar products)

AL'TSHULER, V.S., doktor tekhn. nauk, otv. red.; FAIBEROV, I.L.,
doktor tekhn. nauk, prof., otv. red.

[Gasification and the pyrolysis of fuels; collection of
articles] Gazifikatsiia i piroliz topliv; sbornik statei.
Moskva, Izd-vo "Nauka," 1964. 188 p. (MIRA 17:6)

1. Moscow. Institut goryuchikh iskopayemykh.

AL'TSHULER, V.S., doktor tekhn. nauk; KLIRIKOV, G.V., inzh.

Gasification of high-sulfur heavy liquid fuel under pressures
up to 70 bar with derivation of industrial gas. Teploenergetika
11 no.4:70-73 Ap '64. (MIRA 17:6)

1. Institut goryuchikh iskopayemykh AN SSSR.

SECHENOV, G.P.; AL'TSHULER, V.S.

Gasification of Krasnoyarsk lignite in a fluidized bed at a
gauge pressure of 20. Gas. prom. 7 no.9:15-20 '62.

(MIRA 17:8)

AL'TSHULER, V.S.; KLIRIKOV, G.V.

Thermodynamic characteristics of the gassification of sulfurous
mezut at pressures ranging up to 100 at. Gaz. prom. 8 no.4:12-17
'63. (MIRA 17:10)

AL'TSHULER, V.S.; SHAFIR, G.S.; SHEVTSOV, V.P.

Obtaining processing gas for the synthesis of oxygen-containing
compounds. Gaz. prom. 9 no.7:38-43 '64. (MIRA 17:8)

AL'TSHULER, V. Ye.

"Hereditary Differences in Sires and Environment Responsible for the
Variability of the Average Records of Daughters," Dokl. AN SSSR, 24, No.4, 1939.

PA 68T76

AL'TSHULER, V. YE.

USSR/Medicine - Flies
Medicine - Life, Duration

May 1948

"Experimental Research on Intraspecific Struggles,"
V. Ye. Al'tshuler, B. A. Gertsberg, Saratov State
U, 4 pp

"Dok Ak Nauk SSSR" Vol LX, No 5

Materials obtained by one of authors in a previous
work show a direct experimental indication of intra-
specific struggles and permit clarification of some
characteristic details which arise from it. Authors
attempted to explain relation between increased life
span of one line of flies to development of another
line. Submitted by Academician I. I. Shmal'gauzen
20 Mar 1948.

68T76

AL'TSHULER, V.Ye.

Uniformity of conditions of historical and individual develop-
ment in the formation of species. Zhur.ob.biol.15 no.1:59-64
Ja-F '54. (MLRA 7:2)
(Dairy cattle) (Variation (Biology))

AL'TSHULER, V.Ye., prof.; LEVCHENKO, F.F., aspirant

Method for housing cattle which can be applied to the entire zone.
Zhivotnovodstvo 20 no. 10:28-32 0 '58. (MIRA 11:10)

1. Tadzhikskiy sel'skokhozyaystvennyy institut.
(Tajikistan--Cattle)

AL'TSHULER, V.Ye., prof.; NIKITINA, L.L., starshiy laborant; KOLOBOVA, V.,
zotekhnik; TIKHOMIROVA, Ye., zotekhnik

Checking standards for the judging of bulls based on various
numbers of daughters. Sbor. nauch. trud. Ivan. sel'khoz. Inst.
no.19:92-100 '62. (MIRA 17:1)

1. Kafedra razvedeniya sel'skokhozyaystvennykh zivotnykh i
molochnogo dela (zav. - prof. V.Ye. Al'tshuler) Ivanovskogo
sel'skokhozyaystvennogo instituta.

AL'TSHULER, V.Ye., prof.; MAKOVSKIY, V.I., assistant; BOBKOV, V.V., zootekhnik

Effectiveness of judging cows by their milk yield and butterfat percentage based on various numbers of lactation periods.

Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:101-107 '62.

(MIRA 17:1)

1. Kafedra razvedeniya sel'skokhozyaystvennykh zivotnykh i molochnogo dela (zav. - prof. V.Ye. Al'tshuler) Ivanovskogo sel'skokhozyaystvennogo instituta.

AL'TSHULER, V.Ye., prof.; FATEYEV, V.N.

Important possibility for the improvement of breeding work with
dairy cattle. Agrobiologia no.1:110-116 Ja-F '65. (MIRA 18:4)

1. Ivanovskiy sel'skokhozyaystvennyy institut.

AL'TSHULER, Ya., polkovnik meditsinskoy sluzhby; TABRATOV, P.,
podpolkovnik

A young physician is serving. Av. i kosm. 48 no.10:78-79
0 '65. (MIRA 18:11)

AUTHOR: Al'tshuler, Ya.A.

119-2-8/13

TITLE: Calibration of a High-Temperature Optical Pyrometer (Graduirovka vysokotemperaturnykh opticheskikh pirometrov).

PERIODICAL: Priborostroyeniye, 1958, Nr 2, pp. 23-25 (USSR)

ABSTRACT: In 1957 the optical pyrometer $\text{O} \text{O} \text{O} \text{P}$ was constructed and built at Lvov, which makes it possible to measure temperatures of up to 3200° . At the same place also test models for a temperature range of from 1500 to 6000° C were produced. A new method of calibration was suggested by the constructor, which means a saving of the tedious work of establishing an auxiliary scale from 800 to 1400° . The accuracy with which the points 2200 , 2800 , 3200° C could be determined amounted to ± 14 , ± 20 , $\pm 23.6^{\circ}$. For the pyrometers with a range of from 2200 to 6000° C an accuracy of ± 19.5 , ± 41.3 , and $\pm 87^{\circ}$ is attainable for the points 2600 , 4000 and 6000° C. There are 3 Slavic references.

AVAILABLE: Library of Congress

Card 1/1 1. Optical pyrometers-Calibration

SOV/119-58-10-6/19

AUTHORS: Al'tshuler, Ya. A., Engineer, Kogan, A. V., Engineer

TITLE: Improved Method for the Adjustment of the Absorption Filters of Optical Pyrometers (Usovershenstvovaniye metoda podbora pogloshchayushchikh fil'trov opticheskikh pirometrov)

PERIODICAL: Pribirostroyeniye, 1958, Nr 10, pp 18-20 (USSR)

ABSTRACT: In the series calibration of technical pyrometers the selection of the absorption filters with the same pyrometric attenuation coefficient A must be secured. The accuracy in determining A must be as high as possible for the measuring range 3 200 - 6 000 °C. Until now A has been determined by calculation.

It is shown by the author that A can be measured with sufficient accuracy with the optical pyrometer OP-48. OP-48 has a pyrometer lamp with a plane incandescent filament, a very good optical system, a precision resistance and a very accurate sighting.

By a comparative measurement with a black body (represented by a lamp with a FS-5 glass) if the monochromatic light filters (of KS-15 glass, 2 mm thick) have the same attenuation

Card 1/2

Improved Method for the Adjustment of the Absorption Filters of Optical
Pyrometers

SOV/119-58-10-6/19

with the precision pyrometer OF -48 and the normal pyrometer OFFER. It is shown that the A values measured this way coincide, with only the errors of the A determination becoming smaller by about 50 % with the apparatus OF -48. The absorption filters of glass PS-2 of different samples yield different A values at the same thickness. Therefore, the thickness of this glass is corrected for a certain A value and then the filters may also be used. There are 1 table and 3 references which are Soviet.

Card 2/2

24(8)

AUTHORS:

Al'tshuler, Ya. A., Engineer, Bakushohik, Z. I., SOV/119-59-5-12/22
Engineer, Klikshteyn, B. G., Engineer

TITLE:

Measuring the Temperature of Rotating Surfaces (Izmereniye
temperatory vrashchayushchikhnya poverkhnostey)

PERIODICAL:

Priborostroyeniye, 1959, Nr 5, pp 24-25 (USSR)

ABSTRACT:

In the modern production processes of thin organic plastics, paper, thin nonferrous metal foils and many other materials, machines with smooth cylindrical fullers and drums are used. The temperature of the surface of these rotating fullers and drums is an important parameter of the technological process, and must be constantly measured with minimum inertia and maximum accuracy. The measurement of these temperatures is, however, a rather complicated problem. The temperature measured by a radiation pyrometer (radiation temperature) is always lower than the real temperature, and depends on the coefficient ϵ of the total emissivity. The authors made a number of experiments concerning the measurement of the surface temperature on a polished metal fuller. These experiments fully confirmed the restricted applicability of the ordinary radiation pyrometers for the measurement of temperatures of polished metal surfaces with low emission coefficients. The

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Measuring the Temperature of Rotating Surfaces

SOV/119-59-5.12/22

contact methods are well suited for a rather accurate measurement of the temperature of immovable metal surfaces. In case of movable surfaces, however, the results may be much distorted by the large and uncertain errors due to friction. The instruments developed up to date had often a low sensitivity and a high inertia. At the Konstruktor'skoye byuro "Termopribor" (g. L'vov) (Design Office "Termopribor" (Town of L'vov)), a contact-primary element with small inertia was developed for the measurement of temperature of rotating surfaces. This device DTB-018, which no longer shows the shortcomings of former instruments, uses a thin curved plate of heat-conducting, elastic and wear-resisting material as contact element. Electrodes of "chromel" and "kopel" (kopel') are welded to this plate. Various constructive details of this device are discussed in short. Also the errors of measurement caused by friction are evaluated, they are in the order of magnitude of 2°C . Subsequently, the character of the temperature distribution along the plate is discussed. Some technical data of the primary elements DTB-018 are as follows: measuring range 0 to 200°C ,

threshold of sensitiveness 2°C , reproducibility of deflections 0.5°C , inertia under 2 sec, error of measurement of the temperature of an

Card 2/3

Measuring the Temperature of Rotating Surfaces

SOV/119-59-5-12/22

unmoved smooth metal surface 2.5%. The primary elements DTV-18 were tested regarding production possibilities at the Moskovskiy shinnyy zavod (Moscow Tire Plant); they are recommended for the control and regulation of surface temperatures of calenders and similar machines. There are 2 figures, 1 table and 2 Soviet references.

Card 3/3

AL'TSHULER, Ya.A., inzh.; KOLESNICHENKO, A.N., inzh.; LIFKOVICH, M.I., inzh.

Electric corrections of the scales of logarithmic color pyrometers.
Priborostroenie no.2:3-5 F '65. (MIRA 18:3)

ACCESSION NR: AP5010932

UR/0286/65/000/007/3116/0116

AUTHORS: Al'tshuler, Ya. A.; Lipkovich, M. I.

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B

TITLE: Method for measuring temperature with a color photoelectric pyrometer.
Class 42, No. 169828

9M

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 116

TOPIC TAGS: temperature measurement, photoelectric pyrometer, 4

ABSTRACT: This Author Certificate presents a method for measuring temperature with a color photoelectric pyrometer with region shift or effective length exchange without stopping the pyrometer. For automatic shifting, the switching from one measurement region to another is accomplished by a phase shift of the pulse generator supplying the photocell (see Fig. 1 on the Enclosure). The voltage is supplied to the pulse generator during that portion of the period when the light ray intersects the specific pair of light filters used for the given measurement region. Orig. art. has: 1 diagram.

ASSOCIATION: none

Card 1/3

L 45401-65

ACCESSION NR: AP5010932

SUBMITTED: 13Dec63

ENCL: 01

SUB CODE: TD ⁰

NO REF SOV: 000

OTHER: 000

Card 2/3

L 23829-66 ETC(m)-6 WW

ACC NR: AP6007708

SOURCE CODE: UR/0413/66/000/003/0091/0092

AUTHORS: Al'tshuler, Ya. A.; Lipkovich, M. I.; Kolesnichenko, A. N.

ORG: none

29
B

TITLE: Multiposition photoelectric temperature signaler. Class 42, No. 178579
[announced by State Construction Bureau "Thermal Instruments" (Gosudarstvennoye konstruktorskoye byuro "Termopribor")]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 91-92

TOPIC TAGS: temperature gage, photoelectric pyrometer

ABSTRACT: This Author Certificate presents a multiposition photoelectric temperature signaler containing an optical system, a reference radiator, and an amplifier. To provide for independent signaling of several levels of measured temperature with a single temperature of the reference radiator, the signaler has several independent temperature setters connected in parallel. The setters are in the form of amplifier-phase detecting indicators with anode circuits containing two parallel branches (see Fig. 1). A variable load resistance and a semiconductor diode opposing the diode in the other branch are connected in each branch. A switching voltage coil is

Card 1/2

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L 23829-66

ACC NR: AP6007708

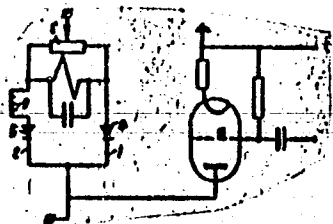


Fig. 1. 1 and 2 - parallel branches in setter anode circuit; 3 - variable load resistance; 4 and 5 - semiconductor diodes; 6 - switching voltage coil.

connected in one of the branches in series with the diode. Orig. art. has: 1 diagram.

SUB CODE: 20, 09/ SUBM DATE: 21Aug63

Card 2/2 IV

AL'TSHUL'YER, Ya.Ye., inzh.; BRODK'Y, A.A., inzh.

Over-all mechanization for loading and unloading lumber. Proizv.-
tekh. sbor. no.2:64-71 '59" (MIRA 13:10)

1. Tsentral'noye proyektno-konstruktorskoye byuro.
(Lumbering--Equipment and supplies)
(Cargo handling)

SMIRNOV, Yevgeniy Vasil'yevich, kand. tekhn. nauk; AL'TSHULER, Yakov
Yeremeyevich, inzh.,; ARKHIPOV, Ye.Ye., retsenzent; ANTONOV,
M.P., red.; FEDYAYEVA, N.A., red; izd-va; BODROVA, V.A., tekhn.
red.

[Hoisting devices for cranes] Gruzozakhatnye ustroistva dlia kranov.
Moskva, Izd-vo "Rechnoi transport," 1961. 161 p. (MIRA 14:9)
(Cranes, derrick, etc.)

AL'TSHULER, Ya.Z., polkovnik meditsinskoy sluzhby; SID'KO, V.S.
Major meditsinskoy sluzhby.

Experience in the organization of medical training for
military personnel. Voen.-med. zhur. no. 1:64 Ja '66
(MIRA 19:2)

ALTSHULER, Ye., A. , AVVAKUMOV, V. I., SHERUK, L. G.

"Resonance Paramagnetic Absorption of Ultrasound in Some
Salts of Rare-Earth and Iron" Groups of Elements" Kasan

Conference on Physics of Magnetic Phenomena,
May, 1956, Sverdlovsk, USSR

AL'TSHULER, Ye. A.

"Traumatic Epilepsy: Pathogenesis, Course, and Treatment." Cand Med
Sci, Kazan' State Med Inst, Kazan', 1953. (RZhBiol, No 6, Nov 54)

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

SO: Sum. No. 521, 2 Jun 55

AL'TSHULER, Ye.A., assistant

Multiple brain tumors. Kaz.med.zhur. 40 no.5:80-81 S-0 '59.
(MIRA 13:7)
1. Iz kafedry nervnykh bolezney (zav. - prof. L.I. Omorokov)
Kazanskogo meditsinskogo instituta.
(BRAIN--TUMORS)

AL'TSHUL'BER, Ya., Izv. med. nauk

Clinical aspects and therapy of traumatic epilepsy. Kaz.med.
zhur. 40 no.1:51-56 Ja.-F '59. (MIRA 12:10)

1. Iz kliniki nervnykh bolezney (zav. - prof.L.I.Omorokov)
Kazanskogo meditsinskogo instituta.
(EPILEPTICS--CARE AND TREATMENT)

AL'TSHULER, Ye.A., kand.med. nauk

Rheumatic encephalitis with epileptiform seizures. Kaz. med.
zhur. 4:14-16 JI-Ag'63 (MIRA 17:2)

1. Kafedra nervnykh bolezney(zav. - prof. L.I.Omorokov)
Kazanskogo meditsinskogo instituta.

STRUCHKOV, V.I.; GRIGORYAN, A.V.; VOL'-EPSHTEYN, G.L.; AL'TSHULER, Yu.B.

State of the lung in late periods following its resection; X-ray observations. Sov.med. 28 no.7:49-57 J1 '65.

(MIRA 18:8)

1. Klinika obshchey khirurgii (zav. - chlen-korrespondent AMN SSSR prof. V.I.Struchkov) i Moskovskogo instituta imeni I.M.Sechenova i rentgenovskoye otdeleniye Gorodskoy klinicheskoy bol'nitsy Nr. 23 imeni "Medsantrud" (glavnyy vrach A.N.Lobanova), Moskva.

AL'TSHULER, Yu.B.

Case of leiomyoma of the stomach. Vest. rent. i rad. 39 no.5:55
S-0 '64. (MIRA 18:3)

1. Kafedra obshchey khirurgii (zav. - chlen-korrespondent AMN
V.I. Struchkov) lechebnogo fakul'teta I Moskovskogo ordena
Lerina meditsinskogo instituta imeni Sechenova na baze Moskov-
skoy porodskoy klinicheskoy bol'nitsy No.23 imeni Medsantrud.

STRUCHKOV, V.I., prof.; LUTSEVICH, E.V.; AL'TSHULER, Yu.B.; LENSKAYA, G.M.

Late results of the treatment of gastrointestinal hemorrhages
of ulcerous etiology. Khirurgia 39 no.10:3-8 O '63.

(MIRA 17:9)

1. Iz kliniki obshchey khirurgii (zav.-chlen-korrespondent
AMN SSSR prof. V.I. Struchkov) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni Sechenova na baze Moskovskoy
gorodskoy klinicheskoy bol'nitsy No.23 imeni Medsantrud
(glavnyy vrach A.N. Lobanova).

11L 13700...
AUTHOR: AL'TSHULER, Yu.G., TATARENKO, A.S., GERCHENOV, S.V. 109-5-11/22
TITLE: Calculation of Delay Systems of the Push-Pull Type. (Raschet zamedlyayushohey sistemy tipa sdvoyennykh "vstrechnykh" shtyrey, Russian)
PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol 2, Nr 5, pp 609-617 (U.S.S.R.)

ABSTRACT: Formulae are derived for the potential, the current, the components of the electromagnetic field, and the wave resistance. The dispersion equation as well as an equation for the connecting resistance is set up.

In conclusion some results of calculations carried out with trial data are compared with one another. The dispersion curves for systems of a general nature and such in a wave guide are given. In both cases good agreement between experimental and computed data was obtained. Curves for the connecting resistance in systems with and without wave guides are shown.

For reasons of comparison the curves for the connecting resistances of the "push-pull" type and for simple ones are given.

Card 1/2

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A061/A101

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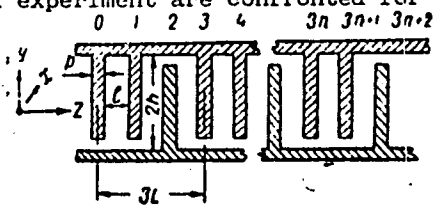
AUTHORS: Al'tshuler, Yu. G., Tatarenko, A. S.

TITLE: Study of a modified counter-collapsible-whip delay system

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 21, abstract 5Zh154
("Uch.zap. Saratovsk. un-t", 1960, 69, 33 - 40)

TEXT: A counter-collapsible-whip delay system, the period of which consists of three conductors (see figure), has been studied. The dispersion equation of the system and the expression for the characteristic impedance are obtained. Theory and experiment are confronted for two modes.

✓
B



A. Zav'yalov

Figure.

[Abstracter's note: Complete translation]

Card 1/1

ANISIMOV, M. V., and TRUBNIKOV, Yu. V.

Dispersion properties of a ribbon helix in anisotropically
conductive cylinders. Radiotekh. i elektron. 9 no. 11:1976.
1986 N 16A. (MIRA 17:12)

9,1300

25952

S/141/61/004/001/012/022
E033/E435AUTHORS: Al'tshuler, Yu.G., Tatarenko, A.S. and Skorodumov, V.I.TITLE: Two-row ladder delay systemPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
1961, Vol.4, No.1, pp.126-135

TEXT: Various variants of ladder-type delay systems find application in millimetric waveband oscillators and amplifiers. This article gives the results of a theoretical investigation into a two-row ladder delay system placed in waveguides having projections and troughs respectively. The cross-sections of such waveguide systems are divided into regions as shown in Fig.2a (projection-type) and Fig.2b (trough-type). Starting with expressions for the potentials and currents for each region and determining the amplitude coefficients from the boundary conditions, the dispersion equations for the symmetrical and anti-symmetrical modes respectively are obtained (for TEM-wave propagation through each region). To determine the components of the electromagnetic field the system is divided into 5 regions (Fig.3). For TEM-waves, the electric vector is obtained for each region by using the expression $\vec{E} = -\text{grad } V(x,y,z)$ and the magnetic field components by

Card 1/5

S/141/61/004/001/012/022
E033/E435

Two-row ladder delay system

the relationships.

$$H_x = -\sqrt{\frac{\epsilon}{\mu}} E_z; \quad H_y = 0; \quad H_z = \sqrt{\frac{\epsilon}{\mu}} E_x$$

Expressions for the coupling impedances for symmetrical and anti-symmetrical modes are also obtained. The effects of the geometrical dimensions of the waveguide system on the dispersion characteristics and on the coupling impedance are investigated for each type of waveguide:

waveguide with projections - the variable parameters are
 W_1 ($p = 1.5$ mm, $b = W_2 = q = 0.5$ mm);

waveguide with troughs - the variable parameter is
 W_2 ($p = 1.5$ mm, $b = W_1 = q = 0.5$ mm).

The results show that the two-row ladder system possesses a relatively wide passband, permits an increase in the interaction space of the electron flux and the high-frequency field, and offers possibilities for utilization in the uhf band. The coupling of such systems with synphase excitation is greater than for single-row ladder systems. By suitable choice of the dimensions of the system the widest passband for the symmetrical mode can be obtained and the

Card 2/5

9,1400

S/194/62/000/006/155/232
D201/D308

AUTHORS: Al'tshuler, Yu.G., Tatarenko, A.S., and Gerchikov, S.V.

TITLE: The analysis of retarding systems of twin interlaced line stretcher type

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, 21, abstract 6Zh141 (Nauchn. yezhegodnik. Saratovsk. un-t. Fiz. fak. i N.-i. in-t mekhan. i fiz. 1955, Saratov, 1960, 100-107)

TEXT: The results of theoretical analysis of retarding systems of twin interlaced line stretcher type are given. The dispersion equation of the system is obtained. The expression for the coupling impedance is calculated. Comparison of coupling impedances of a single and twin line stretcher systems shows that, in the case of the in-phase excitation the coupling impedance of the twin system is greater. [Abstracter's note: Complete translation.]

Card 1/1

AM1037190

BOOK EXPLOITATION

S/

Al'tshuler, YU. G.; Tatarenko, A. S.

Low-power backward wave tubes (Lampy* maloy moshchnosti s obratnoy volnoy), Moscow, "Sovetskoye radio", 1963, 295 p. illus., biblio. 10,000 copies printed.

TOPIC TAGS: low power backward wave tube, electronics, low power backward wave generator, delay system

PURPOSE AND COVERAGE: The book considers the fundamentals of the theory and calculation of low power backward wave generators and gives the necessary information on their service parameters. The book can be used as an aid to radio engineers and students in advance courses of special schools.

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- Ch. VI. Delay systems of the rod terminal type -- 136
- Ch. VII. Delay systems of the flat terminal type -- 143
- Ch. VIII. Spiral delay systems -- 161
- Ch. IX. Some design elements of backward wave tubes and their requirements -- 182
- Ch. X. Some problems of shaping and focusing electron beams in backward wave tubes with a longitudinal magnetic field -- 209
- Ch. XI. Basic service features and parameters of low power backward wave tubes -- 226
- Appendices -- 252
- Bibliography -- 286

SUB CODE: CO, EE

SUBMITTED: 19Sep63 NR REF SOV: 092

OTHER: 075

DATE ACQ: 16Apr64

Card 2/2

AL'TSHULER, Yu.G.; GUTTSAYT, E.M., red.

[Design of low-power backward-wave tubes; a textbook for a course in the design of microwave devices] Raschet malo-moshchnykh lamp obratnoi volny; posobie k kursovomu proektirovaniu po priboram sverkhvysokikh chastot. Moskva, Mosk. energeticheskii in-t, 1962. 81 p. (MIRA 17:4)

S/058/62/000/006/108/136
A062/A101

AUTHORS: Al'tshuler, Yu. G., Tatarenko, A. S., Gerchikov, S. V.

TITLE: Study of wave delay structures of the double, mutually interlaced pin type

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 21, abstract 6Zh141 ("Nauchn. yezhegodnik. Saratovsk. un-t. Fiz. fak. i N.-i. in-t mekhan. i fiz., 1955", Saratov, 1960, 100 - 107)

TEXT: Results of a theoretical study of wave delay structures of the double, mutually interlaced pin type are reported. The dispersion equation is obtained for the considered structure. The expression for the coupling resistance is derived. Comparison of the coupling resistances of single and double pin structures shows that in case of cophasal excitation the coupling resistance of a double structure is higher. ✓

S. A.

[Abstracter's note: Complete translation]

Card 1/1

L 34884-65 EWT(1)/ENA(h) Feb

ACCESSION NR: AP5006043

S/0141/64/007/006/1223/1226

AUTHOR: Al'tshuler, Yu. G.; Anisimov, Ye. V.; Revzin, R. M.

TITLE: Experimental investigation of a traveling-wave strophotron

11
10
P

SOURCE: IVUZ. Radiofizika, v. 7, no. 6, 1964, 1223-1226

TOPIC TAGS: strophotron, traveling wave strophotron, electron frequency tuning, frequency pulling

ABSTRACT: The basic characteristics of a traveling-wave strophotron generator with electric frequency tuning were studied experimentally. A nearly parabolic electrostatic potential well was utilized in the tube. Power output was through a coaxial line connected to reflectors at the cathode end of the tube. The traveling-wave mode was affected by matching of the power output and an external load (a power meter with an alternating load applied to the collector end of the tube). The latter was the cause of a constant resistance of a waveguide. The characteristic impedance of the system when the antenna matching network was used was affected considerably from the characteristic impedance. The waveguide frequency was narrowed sharply, and frequency pulling and spurious oscillations occurred. In addition, magnetic field strength, collector voltage, filament current, and length of the

Card 1/2

L 34884-65

ACCESSION NR: AF5006043

Interaction space affected only slightly the frequency characteristics of the stro-

ASSOCIATION: Саратовский государственный университет (Saratov State University)

SUBMITTED: 05.04.64

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 002

ATD PRESS: 3212

AL'TSHULER, Yu.L.(Stavropol')

Case of true pancreatic cyst. Arkh. pat. 18 no.1:116-117 '56,
(MLRA 9:6)

1. Iz Byuro sudebno-meditzinskoy ekspertizy Stavropol'skogo kraya
(nach-dotsent A.S. Litvak) i psikhonevrologicheskoy bol'nitsy.
(PANCREAS, neoplasms,
cystadenoma (Rus))

AL'TSHULER, Yu.L. (Stavropol')

Hemochromatosis with affection of the central nervous system. Klin.med.
34 no.4:68-70 Ap '56. (MIRA 10:1)

1. Iz psikhonevrologicheskoy bol'nitsy (glavnyy vrach A.Yu.Dorisht)
(HEMOCHROMATOSIS, pathology,
brain (Rus))
(BRAIN, in various diseases,
hemochromatosis (Rus))

ALTSHULER, Yu.L.

Morphological changes in the myocardium and coronary vessels
in hypertension during middle age and in elderly persons.
Uch. zap. Stavr. gos. med. inst. 12:104-105 '63.

(MIRA 17:9)

1. Kafedra sudebnoy meditsiny (zav. prof. A.S. Litvak)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

AL'TSHULER, Yu.L.

Analysis of sudden and unexpected deaths in Stavropol Territory during the last 10 years. Uch. zap. Stavr. gos. med. inst. 12:307-308 '63. (MIRA 17:9)

1. Kafedra sudebnoy meditsiny (zav. prof. Litvak A.S.) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

AL'TSHULER, Z. Ye.

AL'TSHULER, Z. Ye., inzh.; BASTUNSKIY, M.A., inzh.; BERSTEL', V.N., inzh.;
 BIRNBERG, I.E., inzh.; BOGOPOLSKIY, B.Kh., inzh.; BUKHARIN, S.I.,
 inzh.; GERSHTEYN, B.G., inzh.; GRINSHPUN, L.V., inzh.; DREYTER, G.I.,
 inzh.; DINERSHTEYN, A.G., inzh.; ZLATOPOL'SKIY, D.S., inzh.; KIANYUK,
 A.V., inzh.; KOZIN, Yu.V., inzh.; LEVITIN, I.P., inzh.; MEL'NIKOV,
 L.F., inzh.; MEL'KUMOV, I.G., inzh.; NADEL', M.B., inzh.; PAVLOV,
 N.A., inzh.; PASLUN, D.A., inzh.; PMSIN, B.Ya., inzh.; PYATKOVSKIY,
 P.I., inzh.; RAZNOSCHIKOV, D.V., inzh.; ROZENoyer, G.Ya., inzh.;
 ROZENBERG, R.L., inzh.; ROYTENBERG, N.L., inzh.; RYABINSKIY, Ya.I.,
 inzh.; SYPCHENKO, I.I., inzh.; TARACHNIKOV, L.D., inzh.; FEL'DMAN,
 M.S., inzh.; SHTRAKHMAN, G.Ya., inzh.; SHTERENGAS, N.S., inzh.;
 LEVITIN, I.P., otvetstvennyy red.; STEL'MAKH, A.N., red.izd-va;
 BEKKER, O.G., tekhn.red.

[Overall mechanization and automatization of production processes in
 the coal industry] Kompleksnaya mekhanizatsiya i avtomatizatsiya
 proizvodstvennykh protsessov v ugol'noi promyshlennosti. Pod red.
 I.U.V.Kozina i dr. Moskva, Ugletekhizdat, 1957. 82 p. (MIRA 11:3)

1. Gosudarstvennyy proyektno-konstruktorskiy institut. 2. Institut
 Giprougleavtomatizatsiya i Tekhnicheskogo Upravleniya Ministerstva
 ugol'noy promyshlennosti. (for all except: Levitin, Stel'makh,
 Bekker)

(Automatic control) (Coal mining machinery)

MINEVICH, A.S., kand.ekonom.nauk; AL'TSHULYER, Z.Ye., inzh.

Economic effectiveness of automation in coal mines. Mekh.i avtom.
proiz. 14 no.6:50-52 Je '60. (MIRA 13:7)
(Coal mines and mining)
(Automation)

MINEVICH, A.S., kand.ekon.nauk; AL'TSHULLER, Z.Ye., inzh.

Economic efficiency of automatization in mines. Gor. zhur.
no.7:9-13 J1 '61. (MIRA 15:2)

1. Institut gornogo dela im. A.A.Skochinskogo (for Minevich).
2. Gosudarstvennyy proyektnyy institut po avtomatizatsii
ugol'noy promyshlennosti, Moskva (for Al'tshuller).
(Mining industry and finance)
(Automatic control)

AL'TSHULER, Z.Ye., inzh.; MIGACHEV, R.D., inzh.

Effectiveness of automation in mines. Mekh.i avtom.proizv.
16 no.10:47-50 0 '62. (MIRA 15:11)
(Mining engineering)
(Automation)

112-57-7-15034

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 177 (USSR)

AUTHOR: Al'tshuller, A. N.

TITLE: Automatic Small-Pulse Adjustment of Sizes in Metal-Cutting Work
(Avtomaticheskoye regulirovaniye razmerov malymi impul'sami pri obrabotke rezaniyem)

PERIODICAL: V sb.: Avtomatizatsiya tekhnol. protsessov v mashinostr.
Obrabotka metallov rezaniyem i obshchiye voopr. avtomatizatsii, Moscow, 1956, pp 299-309

ABSTRACT: Graphic results are presented of a statistical analysis of fine adjustments by means of small pulses when the actual size of the piece reaches a signal dimension. A layout is presented of an automatic outfit for compensating cutting-tool wear in diamond boring of aluminum pistons with 0.01 tolerance (see figure on p 176). After boring, piston (1) travels to the left, toward a pneumatic caliber; hydraulic cylinder (10) operates and opens the blowing valve (4), which causes purging of the bored hole by air under a pressure of

Card 1/2

112-57-7-15034

Automatic Small-Pulse Adjustment of Sizes in Metal-Cutting Work

3-4 kg/cm². As the piston travels farther to the left, it slips over pneumatic caliber (8). If the bore is equal to or less than the signal dimension, contact (11) dips into the mercury. About 1/2 second later, the traveling cam pushes end switch (12), energizing the PAP coil that turns on the solenoid controlling the oil feed to hydraulic cylinder (15). The piston of this cylinder travels and, through a rack gear, turns guide (16) carrying cam (17) and ratchet catch (18). Ratchet wheel (20), by means of drawbar (21), operates the adjustable mandrel, increasing the cutting-tool gap in proportion to the controlling pulse. A detailed analysis of the experimental results with the small-pulse regulation system is presented. Distribution of dimensions of parts obeys the normal law in the first approximation. There are 8 illustrations (VNII, Moscow).

A. N. L.

Card 2/2

AL'TSHALLER, A.N.

25(1) PHASE I BOOK EXPLOITATION SOV/238

Maemaya nauk SSSR. Komsosya po tekhnologii mashinostroyeniya Avtomatizatsiya mashinostroyeniya Professor. K. III. Priyod i upravleniya rabochimi mashinami (Automation of Machine-Building Processes. Vol. 1: Drives and Control Systems for Process Machinery) Moscow, Izd-vo AN SSSR, 1959. 370 p. Errata slip inserted. 5,000 copies printed.

Ed.: V.I. Dikuhin, Acdatsianski; Ed. of Publishing House: D.M. Ioffe; Tech. Ed.: I.P. Kur'shin.

PURPOSE: This book is intended for engineers dealing with automation of various machine-building processes.

COVERAGE: This is the second volume of transactions of the second Conference on Overall Mechanization and Automation of Manufacturing Processes held September 23-29, 1957. The present volume consists of three parts, the first dealing with automation of engineering measuring methods. The subjects discussed include automatic control of dimensions of machine parts, inspection methods for automatic production lines, in-process inspection devices, application of electronics in automating linear measuring processes, and methods for automatic inspection of bearing races. The second part deals with automatic drives and control of digital computers in the control of metal-cutting machine tools, reliability of relay systems, application of vacuum tube frequency converters in the control of induction motor speeds, magnetic amplifiers and their use in automatic systems, hydraulic drives, and ultrasonic vibrators and auto-matic production lines. The subjects discussed include linkage, indexing, and Geneva-type mechanisms; friction drives, automatic loading devices, discharge-type pneumatic drives, various auxiliary devices for automatic production lines, and synchronous and asynchronous drives. No personalities are mentioned. There are no references.

Ogrodskiy, I. Ya. Decreased Automatic Control of Dimensions in Machine Building 5

Altshuller, A. M. Determining Optimum Conditions for Controlling the Main Parameter of Machined Parts 9

Kopayevich, N. Ye. Lenin prizemling. Inspection Methods for Automatic Production Lines 29

Dvoretzkiy, Ye. B. Standard Devices for Active Control 39

Vikhman, V. S. Application of Electronics in Automating Linear Measuring Methods 45

Klusov, I. A. Metrological and Statistical Checking of Some Automatic Inspection and Sorting Systems 53

Shilov, G. A., Ye. M. Drastik. Experience Gained in Developing Machines for Automatic Inspection of Bearing Races 62

Kazakov, E. V. Digital Computers in Automatic Control of Processes 75

Khetatur, Ya. A. Some Problems Concerning Digital Control of Metal-cutting Machine Tools 88

Zhuzman, V. G., and I. A. Vullfgan. Designing Digital Program Control Systems for Machine Tools 98

Spatkov, B. S. Problems Concerning the Reliability of Relay Systems 107

Lebutov, V. A. Application of Gas Tube Frequency Converters in the Control of Induction Motor Speeds by the Frequency Method 117

Maydis, I. A. Controlled Electric Drive for Metal-cutting Levitskiy, N. I. Development of the Theory of Mechanisms of Automatic Machines Card 5/7 203

AL'TSHULLER, A.N.

Criteria of dimensional precision in metal cutting. Stan.i instr.
34 no.7:22-28 JI '63. (MIRA 16:9)

(Metal cutting)

112-57-7-15013

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 173 (USSR)

AUTHOR: Al'tshuller, A. S.

TITLE: Remote Control for Mercury-Converter Substations Intended for Electrolytic Work (Telemekhanicheskoye upravleniye rtutno-preobrazovatel'nymi podstantsiyami elektroliznykh seriy)

PERIODICAL: V sb. Telemekhaniz. v nar. kh-ve, AN SSSR, Moscow, 1956, pp 229-240

ABSTRACT: The author describes multi-channel and few-channel remote controls for mercury-converter substations developed by him. The many-channel system is built on the amplitude-polar principle, while the few-channel system uses a relay-type distributor-fixator of IAT, AS USSR, with amplitude selection. There are 8 illustrations. Bibliography: 1 item.

N. M. F.

Card 1/1

AL'TSHULLER, B.

Twenty fifth anniversary of the Karakum automobile race. Avt. transport.
36 no. 7:50 J1 '58. (MIRA 11:8)
(Automobile racing)

GUBIN, Semil Akimovich; ZHOV, Solomon Mordukhovich; AL'TSHULLER,
B.N., red.; GALAKTIONOVA, Ye.N., tekhn.red.

[Handbook in safeguarding working conditions, safety factors,
hygiene for auto-transportation establishments] Spravochnik
po okhrane truda, tekhnika bezopasnosti i proizvodstvennoi
sanitarii dlia avtotransportnykh predpriatii. Moskva,
Nauchno-tekhn.izd-vo M-va avtomobil'nogo transp. i shossei-
nykh dorog RSFSR, 1959. 131 p. (MIRA 12:9)
(Transportation--Safety measures)

SALOV, Aleksey Ivanovich; AL'TSHULLER, B.N., red.; GALAKTIONOVA, Ye.N.,
tekh. red.

[Safety measures in the operation and repairs of motor vehicles]
Tekhnika bezopasnosti pri ekspluatatsii i remonte avtomobilei.
Moskva, Nauchno-tekh. izd-vo M-va avtomobil'nogo transporta i
shosseinykh dorog RSFSR, 1961. 175 p. (MIRA 14:9)
(Motor vehicles—Maintenance and repair)

AL'TSHUIER, G. (g.Baku)

If you wish to invent something. Znan.sila 36 no.8:33-35 Ag '61.
(MIRA 14:8)

(Inventions)

82182

S/106/60/000/08/03/003

9,2180

AUTHOR: Al'tshuller, G.B.

TITLE: The Possibility of Controlling the Capacitance Ratio²⁵ of High-Frequency Quartz Resonators²⁵

PERIODICAL: Elektrosvyaz', 1960, No. 8, pp. 26 - 32

TEXT: The author shows the connection between the capacitance ratio of quartz resonators and the basic electric circuit parameters. The capacitance ratio m can be expressed by the formula: $m = \frac{C_k}{C_o}$

where C_k = equivalent capacitance, and C_o = static capacitance. The importance of the parameter m in designing radio equipment is shown. Up to now, it was believed that the value of the capacitance ratio of high-frequency quartz resonators was determined only by the crystal cut and was a constant value for a given cut. In the author's opinion, the value of the capacitance ratio can change within wide limits and is subject to definite laws. The equivalent capacitance value depends to a considerable degree on the irregular distribution of the shift amplitude of the basic type of oscillation and on the relation of plate and electrode dimensions. The static capacitance value depends on the

Card 1/4

lx

82182

S/106/60/000/08/03/003

The Possibility of Controlling the Capacitance Ratio of High-Frequency Quartz Resonators

electrode surface and is practically independent of the quartz plate surface. Formulas are given showing that the capacitance ratio of a quartz resonator does not remain constant. It is shown that the capacitance ratio increases with a reduction of the electrode surface. A 40% increase is found with an electrode surface reduction in one dimension, while a reduction in two dimensions results in an increase by a factor of 2. Changes in the dimensions of the quartz plate at constant electrode dimensions resulted also in a 40% change of the capacitance ratio. The results of a corresponding experimental investigation are shown in graphs. Quartz plates with AT and BT cuts were used in the experiments. It was also established that the capacitance ratio depends considerably on the convexity of the quartz plate. The dependence of capacitance ratio changes of disk-shaped quartz resonator plates with an AT cut on the ratio of the plane section diameter to the disk diameter was also established experimentally. The plate and electrode diameters were 11 and 7.5 mm, respectively; the frequency was 4.5 Mc. The capacitance ratio decreases by a factor of 2 in case of convexity, as shown by a graph (Fig. 5). The temperature dependence of the capacitance ratio is also discussed. All values of the static capacitance of the quartz resonators and the capacitance of the crystal holder terminals were meas-

Card 2/4

LX

82182

S/106/60/000/08/03/003

The Possibility of Controlling the Capacitance Ratio of High-Frequency Quartz Resonators

used on a Q-meter as ordinary capacitances. The value of the capacitance ratio of quartz resonators in oscillator circuits was determined by frequency changes and from the following formula:

$$m = \frac{2(C_0 + C_{cir})}{\Delta C} \left(1 + \frac{C_{cir} + \Delta C}{C_0} \right) \frac{\Delta f}{f},$$

where C_{cir} = capacitance of the circuit, parallel to the resonator, f = frequency. (Abstracter's note: C_{cir} was designated in the Russian text as $C_{ок}$). For calculating the capacitance ratio from the above formula, the frequency of the quartz resonator, the values of C_{cir} and C_0 and the frequency change of the oscillator when connected in parallel to the quartz resonator, the capacitance $C_p = \Delta C$, must be known. These values can be measured using a quartz oscillator with a grounded anode and a quartz resonator connected between the control grid and the ground. The circuit diagram of such an oscillator is given (Fig. 7). The operational conditions of the oscillator and the circuit elements must be selected in such a manner that a self-heating of the quartz resonators is neg-

Card 3/4

82182

S/106/60/000/08/03/003

The Possibility of Controlling the Capacitance Ratio of High-Frequency Quartz Resonators

ligible. There are 6 diagrams and 8 references: 6 Soviet, 1 American, and 1 German.

SUBMITTED: October 1, 1959

44

Card 4/4

AL'TSHULLER, G., inzh.

Light dimmed-out lighthouses. Izobr. i rats. no. 10:38-41 0'60. (MIRA 13:10)
(Technological innovations)

85482

S/108/60/015/011/005/012
B019/B063

9.2583

AUTHORS: Al'tshuller, G. B., Prokhorov, V. A., Members of the Society

TITLE: Compensation of the Temperature-dependent Frequency
Variations of Quartz Generators by Means of the p-n Junction
Capacity of Semiconductor Devices /

PERIODICAL: Radiotekhnika, 1960, Vol. 15, No. 11, pp. 39-44

TEXT: The capacity of a p-n junction in blocked state is a particularly stable parameter of semiconductor devices. If this capacity is controlled by a temperature-dependent voltage, it may be used to compensate temperature-dependent frequency variations. The authors estimate the maximum possible compensation and select the necessary circuit elements. The problem is studied on a quartz generator in which the resonator is interconnected between grid and anode (Fig. 2). It proved to be most efficient to connect the compensating capacity and the quartz in series; the minimum compensating capacity turned out to be most favorable. A relation is derived for the relative value of the change of the control voltage required for the change in capacity. It is finally noted that

Card 1/2

85482

Compensation of the Temperature-dependent
Frequency Variations of Quartz Generators by
Means of the p-n Junction Capacity of Semi-
conductor Devices

S/108/60/015/011/005/012
B019/B053

the frequency stability can be improved only by means of a stabilized
power source. The compensation method described by the authors may be also
used for other radiotechnical purposes. There are 4 figures and 4
references: 3 Soviet and 1 British. X

SUBMITTED: March 12, 1960

Card 2/2

2200

S/106/61/000/001/004/008
A055/A033

9.2583 (1040,1147)

AUTHORS: Al'tshuller, G. B. and Prokhorov, V. A.

TITLE: Selecting the component parts of circuits of thermal compensation of frequency variation of quartz oscillators

PERIODICAL: Elektrosvyaz', no. 1, 1961, 24 - 32

TEXT: Applied to crystal oscillators, the usual method of thermal compensation of frequency variations is ineffective. Even reactances with a high temperature coefficient do not ensure such frequency variation as is necessary for compensation, the variation of reactances being insufficient for that purpose. One of the methods allowing to obtain a sufficient variation of reactances with temperature is the utilization of XR-circuits controlled by thermosensitive resistances (thermistors): for instance, an XR-circuit, composed of an inductance (or a capacitance) in parallel with a thermistor, can be connected in series with the crystal resonator, or an XR-circuit, composed of an inductance (or a capacitance) in series with a thermistor, can be connected in parallel with the crystal. This method of thermal compensation of crystal oscillators has already been described (Ref. 1):

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22208

S/106/61/000/001/004/008
A055/A033

Selecting the component parts

Spears, "Thermally compensated crystal oscillators", The Journal of the British Institution of Radio Engineers, vol. 18, No. 10, 1958), but the article in question contains no precise data on the choice of the component parts of the compensating XR-circuit, and gives no information whatever on the losses caused by such a circuit. Therefore, examining the case of the most usual connections of crystal oscillating systems (with crystal resonator connected either between anode and grid or between grid and cathode), and using equivalent circuits of the Hartley oscillator, the author of the article develops general formulae giving the losses (loss resistances) in the case of either series or parallel connected compensating circuits. He then investigates the problem of controlling the frequency of the crystal oscillator by XR-circuits, and produces formulae and diagrams showing the admissible relationships between the various parameters of the whole circuit. These theoretical results are confirmed experimentally. Other curves show quite clearly the advantage of using thermally compensated crystals, as compared to non-compensated ones. Speaking finally of "BT-cut" and "AT-cut" crystals, the author gives a brief account of a theoretical and experimental investigation showing the peculiarities of the thermal compensation of these crystals. He states that frequency regulation of a "BT-cut" crystal is more difficult than that of an "AT-cut"

Card 2/3

22208

Selecting the component parts ...

S/106/61/000/001/004/008
A055/A033

crystal. The majority of "At-cut" crystals have a positive temperature coefficient of frequency. For their thermal compensation, it is necessary to connect them either in series with a parallel CR-circuit or in parallel with a series LR-circuit. [Abstracter's note: by analogy with G-cut, X-cut and Y-cut crystals, the Russian "AT" and "BT" should most probably be translated by AT-cut and BT-cut]. There are 10 figures and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows: Spears, "Thermally compensated crystal oscillators", The Journal of the British Institution of Radio Engineers, vol. 18, No. 10, 1958.

SUBMITTED: February 16, 1960.

Card 3/3

AL'TSHULLER, G.B.; PARFENOV, B.G.

Special features in controlling the frequency of quartz oscillators.
Elektrosviaz' 18 no.8:31-37 Ag '64. (MIRA 17:8)

L 32837-65 EMP(e)/EWT(1)/EWT(m)/EWP(b)/EMA(h) Pq-4/Peb WH

ACCESSION NR: AP5005581

S/0106/65/000/002/0042/0051

AUTHOR: Al'tshuller, G. B.; Shakulin, V. G. 18

TITLE: Using one quartz resonator for stabilization of several adjacent frequencies 8

SOURCE: Elektrosvyaz', no. 2, 1965, 42-51

TOPIC TAGS: quartz resonator, crystal frequency control, crystal controlled oscillator

ABSTRACT: Formulas are presented which permit determining the frequency deviation in a quartz oscillator for various values and both series and parallel connections of the control resistor. It is shown that the parameter $m = C/C_0$, where C and C_0 are effective and static capacitances of the quartz resonator, respectively, largely determines the frequency control. The parameter m increases with an increase in the electrode diameter and with a decrease in the

Card 1/2

AL'TSHULLER, G. I.

The petroleum-producing industry in 1936 and the basic problems in 1937. V. V. Polyskov and G. I. Al'tshuller. *Neft'naia A.S.S.* 1937, No 1, 4-10. A general discussion on the progress in the developments of the oil industry, with particular emphasis on production.
A. A. Bochtlingk

AS 6-31 A METALLURGICAL LITERATURE CLASSIFICATION

PATSIORIN, A.; AL'TSHULLER, G.^L, inzhener.

Rapid repair of a cracking plant. Neftianik 1 no.10:6-8 0 '56.
(MLRA 9:11)

1. Glavnyy tekhnolog krekning-zavoda imeni Vano Sturua.
(Cracking process)

AL'TSHULLER G

Science study room for petroleum refinery workers. Neftianik 2
no.9:29-30 S '57. (MIRA 10:9)

(Petroleum--Refining)

SOV/92-58-1-11/22

AUTHORS: Al'tshuller, G., and Shapiro, R., Engineers

TITLE: In the Refinery Laboratory (V zavodskoy laboratorii)

PERIODICAL: Neftyanik, 1958, Nr 1, pp. 16-18 (USSR)

ABSTRACT: According to this article, a good job is done by the personnel of the laboratory at the Baku refinery "Neftegaz". Laboratory technicians do their utmost to improve research techniques and to find new methods which will increase the efficiency of analysis and evaluation. The research department of this laboratory made a thorough study of various factors affecting the yield of ethylene produced by pyrolysis. Different types of crude stock were tested, and it was found that the most suitable distillate is produced by coking heavy goudron. Excellent results were also obtained from pyrolysis of paraffinic solar oil. Laboratory findings helped to develop several methods for increasing the ethylene content in the pyrolysis gas. Moreover, the laboratory made experiments with the coking of semi-goudron, which produces a distillate suitable for pyrolysis. A group of laboratory specialists, headed by G. I. Babayeva, developed a device for deter-

Card 1/2

In the Refinery Laboratory

SOV/92-58-1-11/22

mining the content of organic substances in sulfuric acid even when this content does not exceed 2 percent. The introduction of this device in the refinery made control of operating conditions more precise. Coking of tar produced by hydrogenation yields green oil that contains a certain quantity of water which is difficult to remove. Laboratory tests proved that this water can be completely removed if green oil is filtered upward through gravel and shell rock. By applying this method the dehydration process was accelerated, and the fuel consumption reduced. In addition the laboratory personnel developed a filter for the rapid removal of water from dark petroleum products. When this filter was put into use, the precision of the laboratory analysis improved. Laboratory personnel are continuing their effort to improve various technological methods. There are 2 photographs showing laboratory technicians.

ASSOCIATION: Bakinskiy zavod "Neftegaz" (Baku refinery "Neftegaz")

1. Refineries—Operation
2. Laboratories—Performance
3. Industrial research—USSR
4. Petroleum—Fractionation

Card 2/2

AL'TSHULER, G.^S; SHAPIRO, R.

What has been achieved by the inventors. Izobr. v SSSR 1 no.5:14-
17 N '56. (MLRA 10:3)
(B_arrels)

AL'TSHULER, G.S. (Baku); SHAPIRO, R.B. (Baku)

The psychology of invention. Vop. psikhol. 2 no.6:37-49
N-D '56.

(MLRA 10:2)

(Inventions) (Psychology)

AL'TSHULLER, G.; VOROV'YEV, E.

Improve control over wage fund disbursement. Sots.trud. no.11:73-75
N '56. (MLRA 10:1)

(Wages) (Banks and banking)

AL'TSHUL'ER, G.; SHAPIRO, R.

Through fire in a suit. Znan.sila.31 no.12:20-22 D '56.

(MIRA 10:1)

(Clothing, Protective)

Al'tshuler, G.S.

AUTHORS: Al'tshuler, G. and Shapiro R. (Baku) 4-1-1/19
TITLE: What Did the Inventor Propose (Chto predlozhit' izobretatel')
PERIODICAL: Znaniye - Sila, 1958, # 1, pp 1-4 (USSR)

ABSTRACT: The authors tell how a young engineer invented a new technology for wall building. For many years walls had been erected vertically. This method was so widely accepted that the old engineers never tried to find a new way.

The young engineer invented a new method of producing blocks in a horizontal position. Cube-shaped stone blocks were laid into a form placed horizontally on a flat slab; the intervals were filled with a liquid solution. The form maintains the rated dimensions and the slab underneath secures a level plane. The liquid solution may be poured from a bin, eliminating the need for a bricklayer's trowel. Due to the horizontal position of the blocks, the use of cement is considerably reduced. A crane lifts the finished blocks into their proper place.

This new method permitted the bricklayers and plasterers to increase their productive capacity.

There are 3 sketches.

AVAILABLE:
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Library of Congress

AL'TSHULLER, G.; SHAPIRO, R.

Art of inventing. Izobr. i rats. no.9:18-20 S '58. (MIRA 11:10)
(Oil well pumps)

AUTHORS: Al'tshuller, G., Engineer, Shapiro, R., SOV/29-58-10-18/28
Engineer, Baku

TITLE: Oxidized Water (Okislennaya voda)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 10, pp 25 - 27 (USSR)

ABSTRACT: In this paper the authors deal with the history of hydrogen peroxide. The French chemist Professor Tenar discovered hydrogen peroxide in 1818. As he said, it is true that chemists can never foretell the fate of their discoveries. He stated, however, that he was convinced that oxidized water has a great future. More and more people became interested in hydrogen peroxide. Bakh, Mendelejev, Pavlov, Melikov, Semenov and many other Russian scientist investigated this substance. It became known from the papers of Pisarzhevskiy. In the initial stage of this development H_2O_2 could only be obtained as very weak and impure aqueous solution. In 1860 the well-known scientist Vel'tsin wrote full of bitterness that only Tenar was lucky enough to carry out his investigations with a really pure substance. The chemists did,

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Oxidized Water

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however, not give in and found hydrogen peroxide in plants, in the skin and sputum. The German chemist succeeded in 1874 to find H_2O_2 in snow. In every case, however, only very small quantities were concerned. Only in the last decades H_2O_2 was successfully produced by electrochemical methods. There is also a method which makes it possible to produce H_2O_2 immediately from hydrogen and oxygen. This method is less economical but it yields a very pure substance and makes an automated production possible. Two extreme directions prevented for a long time an industrial utilization of H_2O_2 : An overestimation of its explosiveness and an underestimation of its stability. Numerous properties of this substance are already known. Some of them have still remained unexplained. Chemically pure hydrogen peroxide is very stable. In the case of impurification, however, a strong decomposition sets in. Hydrogen peroxide has the advantages of compressed and fluid oxygen. Oxygen produced from H_2O_2 is, however, far more expensive. Using hydrogen peroxide is justified only in cases where costs do not matter and where density and light weight are important. During the second world war H_2O_2 was given several camouflage

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names. The first jet bombers were used in 1944. Also in the case of long distance rockets which were used by the Germans during the attacks of London in 1944 H_2O_2 was used. In the post-war years hydrogen peroxide reached its widest field of application (interior page, rear cover). Every year new fields come up in which hydrogen peroxide is applied.

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AUTHORS: Al'tshuller, G., Shapiro, R.

29-58-6-16/19

TITLE: Above the Speedometer's Limit
(Za chertoy spidometra)

PERIODICAL: Tekhnika Molodezhi, 1958, Vol. 26, Nr 6, pp 32-34
(USSR)

ABSTRACT: This is an amusing story concerning the invention of a civil engineer how the permissible speed of a car can be still raised. This invention was tried out by the engineer with his own car and he came into conflict with the pointsmen. The pointsmen could not solve the problem how a car can be driven with a speed higher than its possible maximum speed. Finally the matter was, however, explained and the civil engineer applied for a patent. There are 2 figures.

1. Passenger vehicles--Velocity
2. Passenger vehicles--Control
3. Inventions--USSR

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AL'TSHULER, G., insh. (Baku); SHAPIRO, R., insh. (Baku)

Oxidized water. Tekh.mol. 26 no.10:25-27 '58. (MIRA 11:11)
(Hydrogene peroxide)