

S/058/62/000/003/008/092
A061/A101

AUTHORS: Veysbrut, A. D., Koltik, Ye. D.

TITLE: The use of Lissajous figures for obtaining out-of-phase voltages

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 12, abstract 3A127 ("Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov. Min. SSSR, 1961, no. 52(112), 123-127)

TEXT: Voltages of two frequencies - one produced by a generator, and the other reduced by n times with a frequency divider - are fed to an electron oscilloscope. A phase shifter connected to the channel of the latter voltage is capable of shifting its phase from 0° to 360° . Starting from the "open" Lissajous figure, it is possible to establish among the voltages the precisely known phase shift angles, the periodicity of which is $360^\circ/(2n)$. The error of the n -dependent precision exceeds 0.03 at an $n = 128$. The realization of the method in the practice and actual diagrams of the system components are considered.

K. Shirokov

[Abstracter's note: Complete translation]

Card 1/1

A-U Sci Res Inst Metrology im D. I. Mendeleev

39057

S/115/62/000/006/005/005
E032/E514

9,4174

AUTHORS:

Grovin, O.N., Galakhova, O.P. and Koltik, Ye.D.

TITLE:

Application of thermal converters at infra-low frequencies

PERIODICAL:

Izmeritel'naya tekhnika, no.6, 1962, 31-34

TEXT:

Possible applications of thermoelectric devices at frequencies below 0.5 cps have not been adequately explored. The authors therefore discuss the use of thermal converters at these frequencies. Circuits are suggested for: 1) the determination of a 90° phase difference between two alternating currents, 2) the indication of the fact that two currents are exactly in phase, and 3) determination of the current and voltage amplitudes. These circuits are respectively shown in Figs. 1, 2 and 3. In the first case the signal recorded by Π contains an alternating component whose amplitude is proportional to the difference from the 90° phase-shift between the currents i_1 and i_2 . The analysis is particularly simple when the two converters are identical. When they are not identical, one of them has to be suitably shunted. In the second case the two elements are connected in opposition and

Card (1/3)

Application of thermal converters ... S/115/62/000/006/005/005
E032/E514

when the two signals are not exactly in phase the indicator shows a variable reading. In both cases it is important that the volt-ampere characteristics should follow the square law. Finally, Fig. 3 shows an arrangement which may be used to determine the current and voltage amplitudes. In this figure $\Phi\beta$ is a phase shifting device, R is a resistor used to adjust the current (voltage) and Π is an indicating meter calibrated in the preliminary d.c. experiment. This device was built at VNIIM and is being used as an indicator of the output voltage of infra-low frequency generators. These generators are designed to produce two equal sinusoidal signals shifted by 90° in phase. There are 3 figures. 4

Card 2/3

KOLTIK, Ye.D.

New method for measuring 90° phase shift. Trudy Inst. Kom. stand.
mer. i izm. prib. no.67:50-56 '62. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni
Mendeleeva.

KOLTIK, Ye.D.

New application of the Hall effect to semiconductors. Priboroostroenie
no.4:4-5 Ap '63. (MIRA 16:4)
(Hall effect) (Semiconductors)

8
12

2011/EWA(h) Pet
AR4046130

S70272/04 000 0010132-132

zh. Metrologiya i izmeritel'naya tekhnika. Otdel'nyy vy'pusk, 7.32.342

Yak, Ye. D.

channel phase calibrating device

Tr. in-tov Kom-ta standartov na uchast'nykh pred'priyatiy, Sov. Min.
4(134), 1963, 76-89

meter calibration, phase calibration, channel calibrator,
trigger, phase shift error, discrimination, phase shifter

The article describes a device for measuring phase shifters and phase
frequencies ranging up to 1000 cps with an accuracy of the order of 0.1%.
It employs a calibrating phase changer (with a range of 0 to 360 degrees, with the phase
shifted from 0 to 360 degrees, and successive frequency readings by 50 to 1000 cps). A
phase shift by 360 degrees at a frequency of 75 cps corresponds to a 1-degree shift at 1000 cps.
error in phase shift readings from the phase shifter is reduced to 1/36th.
analysis is made of irregularities in phase characteristics of a rotary rheostat

KOLTIK, Ye.D.

Increasing the precision of circular phase shifters. Nov.nauch.-
issl.rab.po metr. VNIIM no.4:15-16 '64.

(MIRA 18:3)

L 4403-66 EWT(d)/EEG(k)-2

ACCESSION NR: AP5024168

UR/0115/65/000/008/0025/0027
621.317.772.029.51

AUTHOR: Koltik, Ye. D.; Taube, B. S.; Kulemin, A. A.

TITLE: The F-200 phasometric device

SOURCE: Izmeritel'naya tekhnika, no. 8, 1965, 25-27

TOPIC TAGS: phase shift analysis, instrument calibration equipment, phase meter

23
B

ABSTRACT: Research done at the VNIIM im. D. I. Mendeleeva on precise methods of reproducing phase shifts between two variables showed that for an accuracy of $\pm (0.1-0.05^\circ)$ the frequency range of phase calibrators with cathode-ray tubes can be expanded to 200-300 kc without frequency conversion. The basic circuit of the proposed F-200 phasometric device is given and its operation is described. The device can be used not only for calibrating or checking phase meters within $0.1-0.05^\circ$, but also for testing passive and active electric networks. In the presence of a frequency converter, the input voltages can be converted to an audio frequency range. Orig. art. has: 1 figure. [08]

ASSOCIATION: none

Card 1/2

L 1103-66

ACCESSION NR: AP5024168

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4195

Card 2/2

AP5018737

UR/0286/35/000/019/0043/0049

Shk, Ye. D.; Kravchenko, S. A.

Phase shifting device for very low frequencies. Class 21, No. 171045

Uchen' izobreteniy i tovarnykh znakov, no. 1, 1975, 22-23

Phase shifter, very low frequency

This Author Certificate presents a phase shifting device for very low frequencies. It contains a quartz oscillator, a high frequency square pulse shaper, a circuit, an amplitude limiter, a circuit for measuring the phase shift, a phase shifter, and output amplifiers (see Fig. 1). In the Enclosure is a sinusoidal form of the output voltage curve, an analog calculator is inserted to perform the function of a very low frequency phase shifter. Consists of two integrators and a phase inverter with a feedback loop. Has: 1 diagram.

ENCLOSURE
FIG. 1
ENCLOSURE
FIG. 1

ENCL: 01
OTHER: 000

SUB CODE: EC

REF: AP5016737

ENCLOSURE: 01

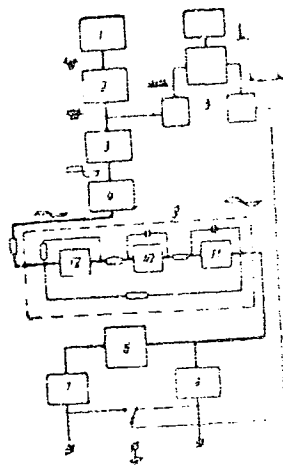


Fig. 1.

1- oscillator; 2- high frequency source phase detector; 3- circuit for measuring phase shift increment; 4- amplitude limiter; 5- circuit for measuring phase shift increment; 6- phase shifter; 7 and 8- output filters; 9- analog calculating circuit; 10 and 11- integrators; 12- phase inverter

KOLTIK, Ye.D.

Two-channel phase calibrator. Trudy inst. Kem. stand., ser. 1
izm. prib. no.74:76-89 '63.

(MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D.I.Mendeleyeva.

L 42786-66 JXT(CZ)

ACC NR: AR6017185 SOURCE CODE: UR/0058/65/000/012/A028/A028

AUTHOR: Koltik, Ye. D. 28
B

ORG: none*

TITLE: Studies at the VNIM in the field of phase measurements 9M

SOURCE: Ref. zh. Fizika, Abs. 12A282

REF SOURCE: Tr. in-tov Gos. kom-ta standartov, mer i izmerit. priborov SSSR, vyp. 76(136), 1965, 83-91

TOPIC TAGS: phase measurement, phase meter, electronic equipment

ABSTRACT: Precise methods and standard equipment are being developed for checking highly accurate single-phase phase meters at the VNIM [All-Union Scientific Research Institute of Metrology]. The development of the first phase meters is being carried out in two directions: the development of standard units of measure and of highly accurate phase meters. A method is being developed for

Card 1/2

I. 00042-67 EWT(d)/EWT(1)/EEC(k)/-2 IJP(c): CC
ACC NR: AP6035865

SOURCE CODE: UR/0413/66/000/020/0077/0077

INVENTOR: Gravin, O. N.; Koltik, Ye. D.; Kravchenko, S. A.

ORG: none

TITLE: Addition and subtraction phasemeter for infrared frequency. Class 21, No. 187148 [announced by the All-Union Scientific Research Institute of Metrology im. D. I. Mendeleev (Vsesoyusnyy nauchno-issledovatel'skiy institut metrologii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 77

TOPIC TAGS: phase measurement, electric test equipment

ABSTRACT: An Author Certificate has been issued for an addition and subtraction phasemeter for infrared frequency waves which input attenuators for both tested and

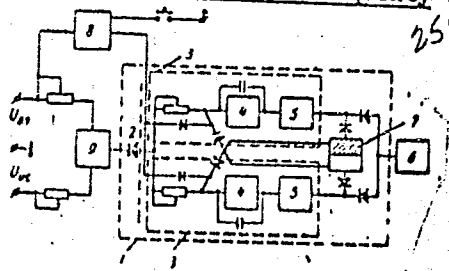


Fig. 1. Infrared phasemeter

- 1 - Measuring converter; 2 - rectifier diode;
- 3 - converter channels; 4 - current integrator;
- 5 - threshold elements; 6 - recording device;
- 7 - bistable trigger; 8 - measurement time controller; 9 - summator; U_{on} - reference voltage; V_{uc} - tested voltage

Card 1/2

UDC: 621.317.772

L 09942-67

ACC NR: AP6035865

reference voltage. The attenuators are connected at the summator input, and the summator output is coupled to a measuring converter which in turns is loaded by a recording unit. To increase accuracy and to reduce measurement time, the circuit shown in Fig. 1 is proposed. Orig. art. has: 1 figure.

SUB CODE: 14/ SUBM DATE: 27Aug65/ ATD PRESS: 5105

Card 2/2 *ll*

ACC NR: AP7000326

(A)

SOURCE CODE: UR/0413/66/000/022/0066/0066

INVENTOR: Koltik, Ye. D.; Kravchenko, S. A.

ORG: none

TITLE: Phase-shift calibrator for extremely low frequencies. Class 21, No. 188584.
 [announced by All-Union Scientific Research Institute of Metrology im. D. I. Mendeleev. (Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 66

TOPIC TAGS: phase measurement, instrument calibration equipment

ABSTRACT: An Author Certificate has been issued for a phase-shift calibrator for extremely low frequencies. The device includes an extremely low-frequency oscillator with two phase shifters and an indicator of phase-shift increment. To increase

Card 1/2

UDC: 621.317.727

ACC NR: AP7000326

APPROVED FOR RELEASE: 06/13/2000

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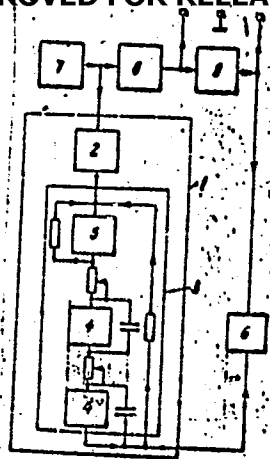


Fig. 1. Calibrator

1 - Extremely low-frequency multiplier;
 2 - amplitude limiter; 3 - multiplying circuit; 4 - quadrature amplifier;
 5 - phase-inverting stage; 6 - phase-shift increment indicator; 7 - extremely low frequency oscillator; 8 - auxiliary phase shifter; 9 - base phase shifter.

accuracy at a given phase shift, the circuit shown in Fig. 1 is proposed. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 16Jul65/ ATD PRESS: 5108

Card 2/2

ACC NR:

AR7000830

SOURCE CODE: UR/0272/66/000/010/0123/0123

AUTHOR: Koltik, Ye. D.; Kravchenko, S. A.

TITLE: Precision phase-shifting devices for the extreme l-f range

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 10. 32. 886

REF SOURCE: Tr. in-tov Gos. kom-ta standartov, mer i izmerit. priborov SSSR, vyp. 82(142), 1965, 67-82

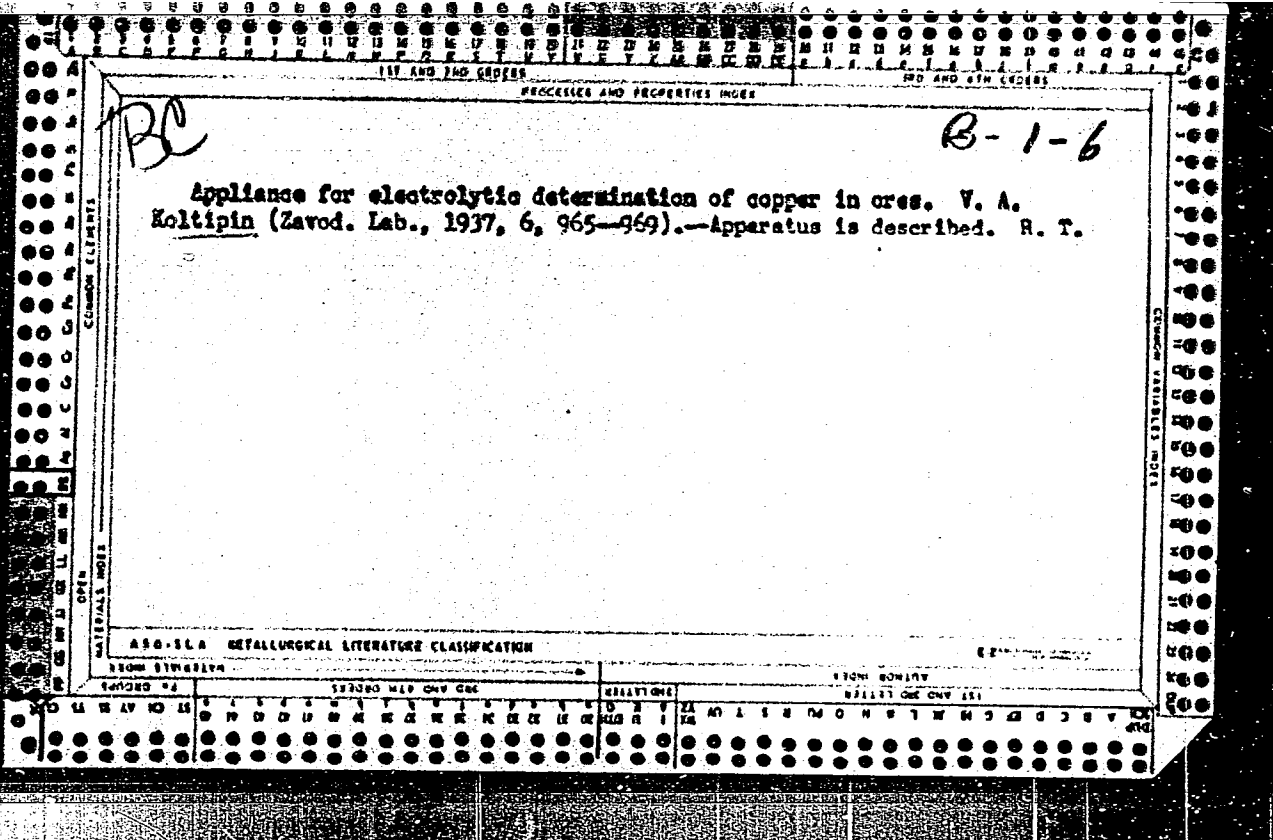
TOPIC TAGS: phase shifter, extreme low frequency, *phase shift*

ABSTRACT: A method of reproducing the phase shifts between two extreme l-f voltages (0.001—100 cps) with an error of not over a few tenths of one degree is investigated. The theory of the method is explained. Two types of new phase-shifting devices based on the use of electronic and optical-mechanical devices are described. The schematic diagrams of the basic units of the phase-shifting devices and the results of their investigation are given. There are eleven illustrations and a bibliography of 3 titles. P. Agaletskiy. [Translation of abstract] [DW]

SUB CODE: 09/

Card 1/1

UDC: 621. 317. 77. 084



ACC NR:

AM5010598

Monograph

UR/

Koltov, Valentin Sergeyevich

Kinetics of reduction-oxidation reactions of uranium, neptunium and plutonium in aqueous solution (Kinetika okislitel'no-vosstanovitel'nykh reaktsiy urana, neptuniya, plutoniya v vodnom rastvore) Moscow, Atomizdat, 1965, 318 p. illus., biblio. 2,300 copies printed.

TOPIC TAGS:

chemical reaction, oxidation reduction reaction, uranium, plutonium, neptunium, ion, reaction rate, reaction mechanism

PURPOSE AND COVERAGE: This book reviews works published up through 1964 on the kinetics of reduction-oxidation reactions of uranium, neptunium and plutonium. A description is given of the reactions of these elements with ions of iron, vanadium, titanium, cerium, thallium, tin with oxygen, hydrogen peroxide, hydrazine, nitric and nitrous acid, with persulfate, chlorate and others. Special attention is given to the reaction between similar ions of uranium, plutonium and neptunium including the reaction of disproportionation and repropotionalization. Over forty reactions are included. The book also gives data on the sequence of reactions, speed constants, activation energy, as well as on the effect of catalyzers, inhibitors and ionic strength upon the speed of reactions. Also, thermodynamic degrees of activation are shown, and more probable mechanisms of reactions are considered. This book can be useful to engineers in atomic industry, to university teachers and

Card 1/2

UDC:541.8:546.791.3/6.546.799.3/.4

ACC NR:

AM6010598

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Ch. V. Disproportionalization of U (V), Np (V) and Pu (V) -- 117

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and Np (VI) up to the pentavalent state -- 136

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SUB CODE: 07/ SUBM DATE: 01Oct65/ ORIG REF: 019/ OTH REF: 122/

Card 2/2

BAISHEV, Saktagan Baishevich; KOLTOCHNIK, N.I., red.; ALFEROVA, F.F.,
tekhn. red.

[Theoretical and historical studies concerning the triumph of
socialism in Kazakhstan] Pobeda sotsializma v Kazakhstane; ocherki
po teorii i istorii voprosa. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi
SSR, 1961. 325 p. (MIRA 14:12)
(Kazakhstan--Economic conditions) (Communism)

ARYKOVA, Amilya Idrisovna; KHULAYEV, Bakhmet Zhanqazovich; KOETCH-
NIK, N.I., red.; HOROKINA, Z.P., tekhn. red.

[Improved type of water intake with a screened bottom gal-
lery] Uluchshennyi tip vodozabora s donnoi reshchatoi ga-
leree. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1961. 79 p.
(MIRA 14:5)

(Water-supply engineering)

CHULANOV, Gabdulla Chulanovich; ISHMUKHAMEDOV, Bukembay Mergaliyevich;
CHECHELEVA, Tat'yana Vasil'yevna; ZHUBANOVA, Zarya Galimovna;
KOLTOCHNIK, N.I., red.; ROROKINA, Z.P., tekhn. red.

[Studies on the history of the national economy of the Kazakh
S.S.R.] Ocherki istorii narodnogo khoziaistva Kazakhskoi SSR.
[By] G.Ch.Chulanov i dr. Alma-Ata, Izd-vo Akad. nauk Kazakh-
skoi SSR. Vol.2.[From 1928 to June 1941] 1928 god - iun'
1941 goda. 1962. 374 p. (MIRA 15:8)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut ekonomiki.
(Kazakhstan--Economic conditions)

Cand
KOLTOMOVA, M. D.: Master Med Sci (diss) -- "The effect of various types of stimulating therapy on the protein content of blood in chronic nutrition disorders of young children". Novosibirsk, 1958. 18 pp (Tomsk State Med Inst), 220 copies (KL, No 1, 1959, 123)

1ST AND 2ND SQUARES PROCESSES AND PROPERTIES INDEX

140 AND 6TH SQUARES

COMMON ELEMENTS

COMMON VARIANTS INDEX

1762. PROPELLER TYPE WATER TURBINES. Kolton, A. Yu. (Kotloturbostroenie (Boiler and Turbine Manuf.), Sept.-Oct. 1948, (5), 12-15). The author examines problems of water flow arising from the substitution of propeller type turbines for the normal type, reexamines the assumptions which are commonly made in calculating turbine runners and gives results of experiments on models of propeller type turbines.

(L).

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ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

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KOLTON, A.Yu., kand. tekhn. nauk; ETIMBERA, I.M., kand. tekhn. nauk.

Investigation and development of a high-speed adjustable-blade
runner. [Trudy] IMZ no.4:5-18 '57. (MIRA 11:4)
(Hydraulic turbines)

124-58-6-6686

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 54 (USSR)

AUTHORS: Kolton, A. U., Kuzminskiy, S. S.

TITLE: On the Selection of Basic Parameters for Curved Draft Tubes of Variable-pitch-blade Water Turbines (K voprosu o vybore osnovnykh parametrov izognutykh otsasyvayushchikh trub povorotnolopastnykh gidroturbin)

PERIODICAL: V sb. ; Gidroturbostroyeniye. Vol 4., Moscow-Leningrad, Mashgiz, 1957, pp 37-42

ABSTRACT: The results of experiments on a series of turbines of different specific speeds equipped with geometrically similar draft tubes of different heights are given. The relationship between the efficiency of a turbine and its height is determined. A turbine equipped with a curved draft tube is found to be less efficient than one equipped with a straight tube. The use of tubes with a variable angle of divergence appreciably increases the efficiency of a turbine as compared to tubes with a constant angle of divergence. This angle must be considerably greater in the inlet portion of the tube than in the outlet portion.

Practical recommendations are advanced for the construction of hydroelectric power plants. B. V. Aronov

1. Turbines--Design 2. Turbines--Performance 3. Turbines--Equipment

KOLTAN, A. Yu.

ARONSON, A. Ya., inzh.; KOLTAN, A. Yu., kand. tekhn. nauk.

Study of the dynamics of turbine operation during dropping of
screens mounted in the draft tube. [Trudy] IZ no. 4:259-272 '57.
(Hydraulic turbines) (MIRA 11:4)

25(2); 10(4)

PHASE I BOOK EXPLOITATION

SOV/1421

Kolton, Abram Yudovich, and Isaak El'yevich Eitinberg

Osnovy teorii i gidrodinamicheskogo rascheta vodyanykh turbin (Principles of Theory and Hydrodynamic Design of Hydraulic Turbines) Moscow, Mashgiz, 1958. 357 p. 3,000 copies printed.

Reviewer: L.A. Simonov, Doctor of Technical Sciences; Ed.: V.P. Gur'yev, Candidate of Technical Sciences; Ed. of Publishing House: Ye.K. Gofman; Tech. Ed.: R.G. Pol'skaya; Managing Ed. for Literature on the Design and Operation of Machinery (Leningrad Division, Mashgiz): F.I. Fetisov.

PURPOSE: This book is intended for designers and researchers in the field of hydraulic machinery building and may also be used by students specializing in power-machinery building.

COVERAGE: The book deals with problems of hydrodynamics related to hydraulic reaction turbines. Basic theoretical principles and modern methods of hydrodynamic design for various types of turbines are presented. In preparing the material the authors utilized the valuable experience of **LMZ** (Leningrad Metal Works) and followed,
Card 1/8

Principles of Theory (Cont.)

SOV/1421

in general, the approach developed by I.N. Voznesenskiy, A.F. Lesokhin, and L.A. Simonov. Use was made of experimental work, done by the hydraulic turbine laboratory of the Leningrad Metal Works and research done by VIGM (All-Union Institute of Hydraulic-machinery Building), the Leningrad Polytechnic Institute imeni Kalinin, and the Moscow Higher Technical School imeni N.Ye. Bauman. Chapters I, V, VI, and VIII were written by I.E. Etinger, and Chapters II, III, IV, VII and IX by A.Yu. Kolton. The authors thank personnel of the design department and laboratory of the Leningrad Metal Works and their supervisor N.N. Kovalev, Corresponding Member of the Academy of Sciences, USSR, for valuable assistance in preparing the book. There are 40 references, 39 of which are Soviet, and 1 English.

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60. Design of the axial guide apparatus	341
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62. Flow around the runner-wheel vanes of an axial-flow turbine (with axial guide apparatus) under propeller and combined regimes	350

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5-8-59

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of horizontal hydraulic turbines. Energomashinostroenie 7
no.10:5-9 0 '61.

(MIRA 14:10)

(Hydraulic turbines)

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kand. tekhn. nauk.

Basic principles of the establishment of new nomenclature on
large Kaplan and Francis-type hydraulic turbines. [Trudy] LMZ
no.10:39-52 '64. (MIRA 18:12)

KOLTON, A.Yu., kand. tekhn. nauk; NEVSKIY, D.Yu., inzh.

Development and study of the runners of the turbines of
the Krasnoyarsk Hydroelectric Power Station. [Trudy] LMZ
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KOLTON, A.Yu., kand. tekhn. nauk; KAN, A.V., inzh.

Construction of a meridional flow with consideration of
the blade constraintment. [Trudy] LMZ no.10:96-104 '64.
(MIRA 18:12)

AR5005864

8 0124 24 000/011/B024/B024

zh. Mekhanika, Abs. 11B142

ton, G. A.

ment of radiation in problems of flow about a blunted axially-
body in a hypersonic gas stream.

Zap. Leningr. gorn. in-ta, v. 44, no. 3, 1964, 39-36

hypersonic flow, gas dynamics, shock wave, temperature profile,
blunted body flow

A system of gasdynamics equations is considered, in which account
is taken of the viscosity, thermal conductivity, and radiation. The radiation
and the radiant energy density are neglected. It is assumed that the
gas density by the viscosity and the Prandtl number are constants,
surface of the body is thermally insulated and absolutely black.
solution of the problem is sought by the Energy-Freeman method, i.e.,

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of a series in powers of the compression behind the shock wave. Only
respond to infinite compression are taken into account. Along the
the problem reduce to the solution of one nonlinear integral equa-
determination of the enthalpy. The solution of this equation is ob-
cessive approximation. Various particular cases are investigated.
Example, gas temperature profiles are given along the symmetry line for
and 30). It is noted that these profiles have a form characteristic
layer problems: the temperature remains practically unchanged in the
of the shock layer, with the exception of the immediate vicinity of
which the flow takes place, where the temperature gradient is quite
Lyunkin.

and NAME. ME

ENCLOSURE 00

WT 1 / EPA(b) / BK(v) / FCS(x) Pd-a Pa- ASD - AFNL SSL / AFETR/
ASD(C) / BSD / AEDC(a) RM / WW 5 / 0043 / 64 / 000 / 003 / 0103 / 0109
NK: AP4044460

Olton, G. A.

Viscous radiative gas flow near the stagnation point of a

Zagreb, Univerzitet, Vostnik, Serija matematiki,
astronomii, no. 3, 1964, 101-109

hypersonic flow, heat conducting gas flow, radiative gas
waves, stagnation point flow, iteration method

The Freeman-Cherny method is applied to determining viscous
heat-conducting radiative gas near the stagnation point of
a body. Dissipation, density of radiative energy, radi-
ation pressure, and the effect of radiation on the free stream flow
are neglected. The method consists in the solution of a
linear integro-differential equation for the gas enthalpy.
This is transformed to an integral equation, the solution of
which is sought by successive approximations. Flow past a sphere is
taken as an example. The method also makes it possible to deter-

NR: AP4044460

Temperature distribution in a shock layer near the stagnation
pt. art. has: 14 formulas.

ABSTRACT: none

DATE: 24May63

ATD PRESS: 3097

ENCL: 00

BY: ME, AS

NO REF SOV: 007

OTHER: 001

EWI(d)/EWI(l)/EWI(w)/EWI(a)/EWI(w)/EWI(v)/EWI(d)/EWI(v)/EWI(h)/
EWI(c) Pd-1/Pe-5/Pf-4/Feb WW/EW

AP5012134

UR/OG4 3/65/000/002/0118/0126

Author: Felton, G. A.

49
B

Supersonic flow of inviscid radiating gas past a cone

Uppsala Universitet. Vestnik. Seriya matematiki, mekhaniki i
fiziki. 1965, 118-126

Supersonic flow, inviscid gas, radiating gas, boundary layer, shock
wave, absorption coefficient, radiation behind shock wave, hypersonic
flow, enthalpy

The effect of radiation on the characteristics of a hypersonic gas flow
is considered. A system of equations of gas dynamics with radiation
absorption is written and is reduced to a nonlinear integral equation for
the "boundary layer" method developed by Chapman, Cherry,
and others. Only a limiting solution is given that is valid
behind a shock wave as $\gamma \rightarrow 0$. The
hypersonic flow of radiating gas past a cone is also considered
in two cases: 1) total reflection, and 2) reflection of a
shock wave with a semiapex angle of 30° in the gas. A diagram of a
cone with a semiapex angle of 30° in the gas is shown where at $h = 30^\circ$ and
at $h = 25^\circ$ km is presented as an illustrative example under the assumption

AP5012134

0

mean absorption coefficient of the gas depends on the temperature. The shock wave at the tip of the cone is determined and an expression is given for the shock wave curvature with $\gamma \ll 1$. It is concluded that the radiated gas behind a shock wave influences the temperature, heat capacity, gas density, and that the direction of curvature of the shock wave depends on the difference between temperatures at the wall and at the tip of the cone. This solution may be extended to hypersonic flow past a sharp-nosed body of revolution of any shape. Orig. art. has: 17 formulas [AB]

none

100-1-53

ENCL: 00

CODE: ME, 70

10

OTHER: 001

PRESS 324

KOLTONSKI, W.
KOLTONSKIY, V. and MALETSKIY, I.

"Possibility and Extent of Applied Ultrasonic Methods to the Study of Ores"
Byull. Polskoy Akad. Nauk. Otd. 4, No 3, 1953, pp 125-128

Velocity and absorption of ultrasound in various ores (anhydride, salt, limestone, coal, sand) were studied in laboratory conditions in the frequency range of 30-150 kc. It was found that absorption slightly rises in the frequency range of 30-80 kc and increases rapidly over 80 kc. Velocities were measured on cylindrical specimens by means of the standing wave. Longitudinal waves moved at a 4000 meters/sec velocity in salt. Authors consider this method useful for study of ore structure. (RZhFiz, No 11, 1954)

SO: W-31187, 8 Mar 55

KOLTONGSKI, W.

"Synthesis of Plans and Achievements of Modern Electroacoustics", p. 334,
(PRZEGLAD TELEKOMUNIKACYJNY, Vol. 27, No. 11, Nov. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5,
May 1955, Uncl.

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Malecki, L. Using ultrasonics in research on the structure of homogenous geologic deposits. p. 157.

ARCHIWUM GORNICTWA I HUTNIC'TWA, Warszawa, Vol. 3, no. 2, 1955.

SO: Monthly List of East European Accessions, (SERIAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

KOLTOMSKI, W.

"New Possibilities for Applying Supersonic Waves", p. 41, (PRZEGLAD TELEKOMUNIKACYJNY, Vol. 28, No. 2, Feb. 1955, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

POLAND/Acoustics - Ultrasonics

J-4

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 6585

Author : Koltonski Waclaw

Inst : Institute of Basic Technical Problems, Poland

Title : Investigation of Rock and Raw Materials of Rock by Means of Ultrasonics

Orig Pub : Proc. II conf. ultrason., 1956. Warszawa, PWN, 1957, 155-161

Abstract : The author reports the results of an investigation of the possibility of using ultrasonics in mining, for the investigation of rocks and the commercial raw material obtained from rocks. An investigation of the absorption of ultrasound makes it possible to detect deposits of limestone and sandstone with desired mechanical properties, and also to classify rapidly feldspars as a function of their SiO_2 content. A study of the propagation of ultrasonic pulses at the deposit of mountain rocks makes it possible to observe the presence of cracks, various discontinuities, and stratification of granites and basalts. A possibility is indicated of defecto-

Card : 1/2

KOLTONSKI, WACLAW

"Outlines of the theory of transmission and reproduction of stereophonic sounds"

p. 57 (Panstwowe Wydawn. Naukowe, 1958, Warsaw, Poland)

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No. 1, Jan. 59.

KOLTONSKI, WACLAW

~~FISCHER, F.A.~~

35

PHASE I BOOK EXPLOITATION POL/5981

Symposium on Electroacoustic Transducers. Krynica, 1958

Proceedings of the Symposium on Electroacoustic Transducers [held in] Krynica, 17-26 September, 1958. Warsaw, Panstwowe Wydawnictwo Naukowe, 1961. 442 p. Errata slip inserted. 630 copies printed.

Sponsoring Agency: Polish Academy of Sciences. Institute of Basic Technical Problems.

Ed. in Chief: Janusz Kacprowski, Doctor of Sciences; Editing Committee: Ignacy Malecki, Professor, Doctor of Sciences; Wincenty Pajowski, Doctor; and Jerzy Wehr, Master of Sciences; Secretary: Juliusz Mierzejewski.

PURPOSE: This book is intended for physicists and acoustical engineers.

COVERAGE: The book is a collection of detailed research papers constituting the proceedings of a conference held in Krynica from 17 to 26 September 1958 under the auspices of the Institute of Technical Problems, Polish Academy of Sciences.

Card 1/8

Symposium on Electroacoustic Transducers

POL/5981

Ch. 3.	Design and Properties of Electroacoustic Transducers	
28.	Intermodulation distortion in loudspeakers. Joseph Merhaut	275
29.	On the behavior of second-order gradient microphones in the near field. Carl Feik	
30.	Certain problems of loudspeakers in stereophony and pseudo-stereophony. <u>Waclaw Koltowski</u>	289
31.	Possibilities of increasing the efficiency of electromechanical transducers applied to electrodynamic loudspeakers. Zoltan Barat	299
32.	Methods for mechanical damping of dynamic loudspeakers by the application of porous materials. L. Keibs	305
33.	Combined electroacoustic transducers with the directivity characteristic rotating azimuthally. Jerzy K. Skrzela	313
34.	Experimental research on the radial ultrasonic field of the cylindrical barium titanate transducer. T. Tarnoczy and A. Illenyi	327
35.	Construction of up-to-date electroacoustic transducers. Stevan Milosavljevic	337
		345

Card 6/8

Symposium on Electroacoustic Transducers

POL/5981

- 44. Wide-band loudspeaker with a variable angle diaphragm cone.
Waclaw Koltowski 415
- 45. Application of metallized plastics to diaphragms of con-
denser microphones. Jan Ryll-Nardzewski 419
- 46. Application of transistor converters to the polarization of
condenser transducers. Jan Ryll-Nardzewski 421
- 47. Electrocapillary transducer. Bogna Klarner, Saturnina
Woszczerowicz, and Mieczyslaw Kowalski 435

AVAILABLE: Library of Congress

SUBJECT: Electric Power (Electronics)

Card 8/8

SK/dmp/gmp
7-5-62

KOLTONSKI, Wacław, dr inż.

Optimum stereolistening conditions in living quarters. Przegl
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The petroscope, an ultrasonic apparatus for testing building rocks.
Przełł geol 10 no.10:534-536 0 '62.

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Warszawa.

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Objective method of stereophonic effect control. Przegł telekom
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Bul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.inform.
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Lungs - Tumors

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Iz Kafedry patologicheskoy anatomii (zav.-prof. I. V. Davydovskiy) lechebnogo fakul'teta
2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni I. V. Stalina.
rcd. 6 Decmeber 1950.

SO: Monthly List of Russian Accessions, Library of Congress, April 1952 ~~1953~~, Uncl.

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Gastrointestinal changes in hypertension; gastrointestinal crisis
in hypertension. Arkh.pat. 18 no.8:30-39 '56. (MLBA 10:2)

1. Iz kafedry patologicheskoy anatomii (sav. - deyatvitel'nyy chlen
AMN SSSR I.V.Davydovskiy) II Moskovskogo gosudarstvennogo meditsin-
skogo instituta imeni Stalina.

(GASTROINTESTINAL SYSTEM, in various diseases,
hypertension (Rus))

(HYPERTENSION, pathology,
gastrointestinal system (Rus))

EXCERPTA MEDICA Sec 5 Vol 12/10 General Path Oct 59

3044. THE MORPHOLOGY AND PATHOGENESIS OF HYPERTENSIVE CRISES
(Russian text) - Koltover A. N. Dept of Pathol. Anat., II Med. Inst.,
Moscow - ARKH. PATOL. 1955, 21/3 (15-21)

In hypertension the increase in blood pressure is less dangerous than the crises which are observed in this disease. The organs of 40 patients with hypertension and 5 subjects who had died from chronic renal diseases accompanied by uraemia were examined. Two kinds of changes were observed in the vessels: (1) compensatory-adaptive processes such as hyperelastosis, muscular hypertrophy and elastofibrosis and (2) acute changes developing during the crisis - plasmatic imbibition of the vascular wall, necroses, aneurysms with rupture and stasis. Vascular spasms with paralysis of the vascular wall, and capillary and venous stasis were to be seen. Three degrees of severity of a crisis are distinguished: (1) rapidly disappearing plasmatic-haemorrhagic parietal imbibition, sometimes below the subendothelial layer; (2) deep damage of all parietal layers by protein masses and blood with necroses, small thrombi and miliary aneurysms; (3) vascular ruptures with haemorrhages (apoplexies). Sometimes the crises show no clinical signs though anatomical changes are present; they may have a limited localization but also may develop simultaneously in many vascular regions and organs. In order of frequency the pancreas comes first, followed by the brain, kidneys and gastro-intestinal tract. In the brain the crises are often accompanied by haemorrhages and ischaemic necroses; microaneurysms are also formed, which is only extremely rarely observed in the kidneys. Perivascular infiltrations are very frequent along the vessels of the gastro-intestinal tract. Brandt - Berlin (V, 18)

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Features of brain damage in thrombosis of the internal carotid artery at different levels. Arkh. pat. 22 no. 11:72-78 '60.

(MIRA 14:1)

(BRAIN--BLOOD VESSELS)

KOLTOVER, A.N.; GANNUSHKINA, I.V.; LYUDKOVSKAYA, I.G.

So-called obliterating endarteritis of the cerebral vessels in thrombosis of the internal carotid artery. Zhur. nevr. i psikh. 61 no.5:657-664 '61. (MIRA 14:7)

1. Laboratoriya patomorfologii nervnoy sistemy (zav. - dotsent A.N. Koltover) Instituta nevrologii (dir. - prof. N.V.Kononov) AMN SSSR, Moskva.

(THROMBOSIS)

(ARTERIES--DISEASES)

(BRAIN--BLOOD SUPPLY)

KOLTOVER, A.N.; LYUDKOVSKAYA, I.G.

Morphological changes in the brain following rupture of an aneurysm of the system of anterior cerebral arteries. Zhur. nevr. i psikh. 61 no.8:1182-1186 '61. (MIRA 15:3)

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(BRAIN)
(INTRACRANIAL ANEURYSMS)

KOLTOVER, A.N.; LYUKOVSKAYA, I.G. (Fomina); VERESHCHAGIN, N.V. (Moskva)

Pathogenesis and morphology of disorders of cerebral blood circulation in diseases of the carotid and vertebral arteries. Arkh. pat. 24 no.8:18-26 '62. (MIRA 15:8)

1. Iz laboratorii patomorfologii nervnoy sistemy (zav. - dotsent A.N. Koltover) Instituta nevrologii AMN SSSR (dir. - prof. N.V. Konovalov).

(CEREBROVASCULAR DISEASE) (CAROTID ARTERY--DISEASES)
(VERTEBRAL ARTERY--DISEASES)

KOLTOVER, A. N.; LEBEDEVA, N. V.

Acutely developing foci of gray softening in the brain. Nauch.
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(BRAIN--SOFTENING) (APOPLEXY)
(CEREBRAL ARTERIOSCLEROSIS)

KOLTOVER, A. N.; GANNUSHKINA, I. V.; FOMINA, I. G.

Morphological changes in the brain in thrombosis of the internal carotid artery. Report No. 1. Nauch. trudy Inst. nevr. AMN SSSR no.1:486-498 '60. (MIRA 15:7)

1. Institut neurologii AMN SSSR.

(THROMBOSIS) (CAROTID ARTERY--DISEASES)
(CEREBRAL ARTERIOSCLEROSIS)

SHMIDT, Ye.V.; VERESHCHAGIN, N.V.; KOLTOVER, A.N.; BRAGINA, L.K.

Role of the pathological sinuosity of the carotid and vertebral arteries in disorders of cerebral circulation. Zhur.nevr.i psikh. 62 no.8:1149-1159 Ag '62. (MIRA 15:12)

1. Institut neurologii (dir. - prof. N.V.Konovalov) AMN SSSR, Moskva.

(CEREBROVASCULAR DISEASE)(VERTEBRAL ARTERY—DISEASES)
(CAROTID ARTERY—DISEASES)

KOLTOVER, A.N.; LYUDKOVSKAYA, I.G.; GANNUSHKINA, I.V.

Morphological changes in the brain in various localizations of the thrombus in the internal carotid artery. Nauch. inform. Otd. nauch. med. inform. AMN SSSR no.1:56-58 '61.
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1. Institut nevrologii (direktor-- deystvitel'nyy chlen AMN SSSR prof. N.N. Konovalov) AMN SSSR, Moskva.

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S/254/63/000/002/002/003
0051/0300

AUTHOR: Koltovoy, B.

TITLE: The planet of riddles

PERIODICAL: Nauka i zhyttya, no. 2, 1963, 28-29

A popular review discussing the possibilities of
life on Mars. There is 1 figure.

ZHITOMIRSKIY, V.K. [translator]; KOLTOVYI, B.I. [translator]; UZHIK, G.V.,
prof., red.; SIDOROV, V.Ya., red.; BELEVA, M.A., tekhn. red.

[High temperatures in aircraft structures; articles translated from
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(MIRA 14:12)

(High temperatures) (Thermal stresses) (Airplanes)

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KOETS, George, kand. tekhn. nauk

Optimum value of the calculational hourly central heating coefficient in RNR systems. Izv. vyb. ucheb. zav.; energ. 7 no.6&61-69 Je '64 (MIRA 17:8)

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M. Hoch

ASB-514 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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282 p. diagsr.

Technical rating of molding work.

DLC: TS230.C45

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Kol'tsov, A. D. - "On an experiment of the organization of work of section agronomists in line with the agro-technical servicing of the kolkhozes," In symposium: Doklady 2-y Resp. agrotekhn, Minf-tsil Mariysk. ASSR, Kozmodem'yansk, 1948, p. 30-52

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7 no.6:8-10 Je '57. (MLRA 10:7)

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(Field crops--Exhibitions)

YAKUBOVSKIY, F.B., red.; BELIAYEV, B.I., red.; VOLNYANSKIY, A.K., red.;
KAMINSKIY, D.N., red.; KOL'TSOV, A.G., red.; KUREK, N.M., red.;
OVSYANKIN, V.I., red.; PRIVALOV, N.H., red.; KHRAMUSHIN, A.M.,
red.; ERISTOV, V.S., red.; UDOD, V.Ya., red.izd-va; TEMKINA,
Ye.L., tekhn.red.

[Papers and reports of the section on industrial construction,
assembling and specialized work of the All-Union Conference on
Construction] Doklady i soobshchenia. Moskva, Gos.izd-vo lit-ry
po stroit., arkhit. i stroit.materialam, 1958. 438 p.

(MIRA 12:7)

1. Vsesoyuznoye soveshchaniye po stroitel'stvu. Moscow, 1958.
Sektzia promyshlennogo stroitel'stva, montazhnykh i spetsializi-
rovannykh rabot.

(Building)

2

INDUCTANCE OF THE CURRENT DISC IN THE
DISC OF AN INDUCTION INSTRUMENT

A.A. Koi'lov
ELEKTROTEKHNIKA, 1965, No. 3, 15-18, in Russian

EW

Existing theories often fail to take into account the inductance of the effective circuit in the disc which may lead to an incorrect analysis of operation. The author presents experimental methods for determining this inductance. The first considers the mechanical forces involved in the disc between the flux and the induced current. These forces also be zero except for an eccentric position of disc and pole. In the experimental investigation the forces were measured by a mechanical dynamometer. The second method for determining the inductance consists in measuring the flux density in the presence and absence of the disc keeping the average flux constant. A comparison of results of both methods appears to show induction meters of different designs, in particular, the agreement of the method of forces, however, in rather large and the other method is preferred.

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103-19-3-9/9

AUTHORS: Kol'tsov, A. A. , Kulikovskiy, L. F. (Kuybyshev)

TITLE: A Telemetering Compensation Device for Linear Displacements
(Telemetricheskoye kompensatsionnoye ustroystvo lineynykh peremeshcheniy)

PERIODICAL: Avtomatika i Telemekhanika, 1958, Vol.19, Nr 3, pp.280-284(USSR)

ABSTRACT: One of the many possibilities for the use of a ferrodynamic measuring mechanism with independent excitation and rectilinear displacement of the mobile part is the application of two such measuring mechanisms in one set. This set is a telemetering apparatus for the measurement of small and large displacements or of other quantities convertible into these displacements. An induction servosystem of linear displacements is investigated here which can be used in automation and in remote control. The measuring mechanism was suggested by L. F. Kulikovskiy and A. A. Kol'tsov and worked out. The test sample was produced in the Laboratory of the Chair for "Automatic, Remotely Controlled and Measuring Instruments and Devices" in the Institute of the Industry, Kuybyshev. A short theory of the system and the technical

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103-19-3-9/9

A Telemetering Compensation Device for Linear Displacements

data of the construction are given. The experiments on the model of the apparatus showed high efficiency of the magnetic circuit. The factor of utilization of the magnetic flow was equal to 0.7. There are 7 figures and 1 reference which is Soviet.

SUBMITTED: May 31, 1957

Card 2/2

USCOMM-DC-60608

KOL'TSOV, A.A., Cand Tech Sci — (diss) "Study of ^{transformer con-}~~converter/trans-~~
~~verters~~ ^{magnations} ~~converters~~ of large linear ~~converters~~." Kuybyshev, 1959. 16 pp with
drawings (Min of Higher Education USSR. Kuybyshev Industrial
Inst in V.V. Kuybyshev). 150 copies (EL, 39-59, 104)

48

14(5), 28(1)

SOV/152-59-1-27/31

AUTHORS:

Kulikovskiy, L. F., Kol'tsov, A. A., Tsiber, A. L.

TITLE:

Automatic Recording of the Product-volume in the Distillation of Light Petroleum Products (Avtomaticheskaya registratsiya ob'yema produkta razgonki svetlykh nefteproduktov)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1959, Nr 1, pp 105 - 111 (USSR)

ABSTRACT:

The **researchers** of the Kuybyshevskiy neftepererabatyvayushchiy zavod (Kuybyshev Petroleum Refinery) (Ref 1) constructed an apparatus for the automatic and accelerated distillation of light oil products. This apparatus draws samples in prescribed intervals, distills and records the temperature prevailing during steam generation as a function of time. The **researchers** of the chair for Avtomaticheskkiye, telemekhanicheskiye i izmeritel'nyye pribory i ustroystva (Automatic, Telemechanic and Measuring Instruments and Devices of the Kuybyshe **Industrial Institute**) developed a device for automatic measuring and recording of volume of distillation products as a function of temperature. This device is used

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Automatic Recording of the Product-volume in the
Distillation of Light Petroleum Products

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in conjunction with the apparatus for an accelerated distillation. An apparatus equipped with such a device is located directly at the place of sample taking where it makes a perfect automation of the crude benzine quality control possible. This apparatus reduces the time required for inspection and increases the accuracy of control. In addition, the number of persons required for operating can be reduced. Based on figure 1, operation of the device is illustrated and a detailed description is given. An inspection carried out under operating conditions gave proof of its reliability during operation. The advantage of this device is the fact that, when used in conjunction with an automatic electronic potentiometer, the latter will not have to be rebuilt. Other compliances constructed for similar purposes by other organizations (Refs 2,3) do not offer this advantage. The device can be employed also whenever an other quantity, (apart from temperature), which is also a function of temperature is to be recorded. There are 7 figures and 3 Soviet references.

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Automatic Recording of the Product-volume in the
Distillation of Light Petroleum Products

SCV/152-59-1-27/31

ASSOCIATION: Kuybyshevskiy industrial'nyy institut im. V. V. Kuybysheva
(Kuybyshev Industrial Institute imeni V. V. Kuybyshev)

SUBMITTED: September 26, 1958

Card 3/3

S/004/60/000/02/03/006

AUTHOR: Kol'tsov, A.

TITLE: Atomic Radio

PERIODICAL: Znaniye-Sila, 1960, ⁸⁵No 2, pp 22 - 24

TEXT: The use of smaller and more economical semiconductor crystals and even of molecules instead of tubes²⁵ is discussed. Basing their research on the principle of energy exchange between active and passive atoms or on the emission and absorption of radio waves²⁵ in molecules, Lenin Prize Winners N.G. Basov and A.M. Prokhorov of the Fizicheskiy institut imeni P.N. Lebedeva, Akademiï nauk SSSR (Institute of Physics imeni P.N. Lebedev of the Academy of Sciences of the USSR) decided to utilize this process for technical purposes. There were two problems: to obtain active molecules and to induce them to emit radio waves. After a number of not quite satisfactory tests the scientists decided to use paramagnetic crystals²⁵. To induce all active molecules to emit radio waves the former were placed in a resonator constructed similar to a radio receiver which could be adjusted to the required frequency. Because of this feature the resonator also serves as an amplifier of radio signals. Its amplifying capacity is 100-1,000 times ✓

Card 1/2

3. 1. 1. 1. 2. 000/002/004/004
A. 1. 5. 1. 1. 2. 0

Author: Ko'l'tsov, A. A.

TITLE: New electromechanical converter

PERIODICAL: Elektromekhanika, no. 2, 1963, 252 - 262

TEXT: The author describes an electromechanical converter with a movable core (Fig. 1) designed by him and M.F. Zaripov (Author's Certificate 125168). The converter is intended for checking and controlling any quantities that can be converted into displacements. It permits measuring both small and large displacements. The magnetic circuit consists of a Γ -shaped core 1 and a movable core 2. The core 1 is made of electrical sheets. The measuring winding 3 is wound on the core 1. The magnetic flux can be considered as consisting of fluxes Φ_{m1} , Φ_{m2} , Φ_{m3} , Φ_{m4} , Φ_{m5} and Φ_{ms} . The leakage flux Φ_{ms} does not cross the measuring winding. The flux linkage Φ_{m3} with the measuring winding, conditioned by Φ_{m3} , Φ_{m4} , does not depend on the coordinate l of the movable core, but the flux linkage, conditioned by Φ_{m1} , Φ_{m2} and Φ_{m5} , is determined by this coordinate. The value of Φ_{m1} and Φ_{m2}

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S/144/63/000/002/004/004
A055/A126

New electromechanical converter

... into the position of the movable core, but the value of the other fluxes ... The author calculates (under certain assumptions) the converter ... in open-circuit condition ... the dependence of the measuring ... E_2 on I and its transconductance S at a constant exciting current. He finds for E_2 :

$$E_2 = E_0 + S k_1 L_N \tag{22}$$

where E_0 is the initial emf of the secondary winding,

$$k_1 = \frac{1}{L_N} \tag{5}$$

and

$$L_N = L - 2n. \tag{9}$$

Thus means that the converter characteristic is a straight line. A formula is ... for E_0 . In load condition, the dependence of the load current on ... variable-core coordinate is also linear. An important property of the mag- ... circuit of the converter is the constancy of its permeability. Comparing ... the transconductance of the characteristic of the electromechanical con- ... with movable windings already examined by him. *Elektromekhanika*, no. 3, ... the author finds that the transconductance of the characteristic of the

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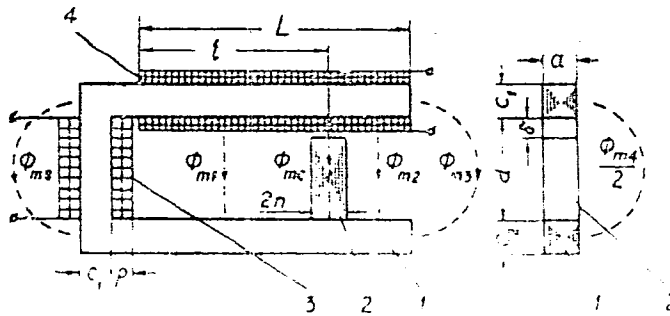
New electromechanical converter

S/144/63/000/002/004/004
4055/A126

converter with movable core cannot be rendered higher than that of the converter with fixed core winding. The converter with movable core is mechanically stronger, its magnetic flux utilization factor is several times smaller; its weight and volume are greater and its copper consumption is higher. Some experimentally obtained characteristics are reproduced; they confirm sufficiently the calculated results. There are 8 figures and 1 table.

SENT: June 8, 1961

Figure 1



Card 3/3

KOL'TSOV, A.A.; KARABANOV, D.N.

Designing measuring circuits of automatic balanced electronic bridges. Izv.vys.ucheb.zav.; prib. 7 no.2:39-45 '64.

(MIRA 18:4)

1. Ufimskiy neftyanoy institut. Rekomendovana kafedroy avtomatizatsii proizvodstvennykh protsessov.

UB/0286 65/000/007/0069/0069

AP5010889

Gil'tsov, A. A.; Karabanov, D. N.

Automatic balanced bridge. Class. No. 62-0675

Изобретение относится к устройствам измерения сопротивлений

Bridge circuit

The Author Certificate presents a multipoint automatic balanced bridge for communication lines intended for measuring active resistances. The influence of switch contact resistance on the loading the power resistances to be measured are connected to independent four-branch units, which are alternately connected by the supply diagonals to the bridge and by the measuring diagonals to the zero point (see Fig. 1 on the drawing art. has 1 diagram).

CLASSIFICATION: none

29Jan64

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ENCL: 01

OTHER: 000

SUB CODE: EC