The Electron Microscope UEMB-100 With Double-lens Condenser   SOV/48-23-4-3/21

depicted by the condenser in the object plane. With the aid of the stigmator, the image turns out very well. Investigations showed that the radius of the cathode tip, when not exceeding 12μ, does not exert any influence upon the quality of the image. The object lens consists of three parts. The upper part is situated in the object chamber, which is made accessible by a valve and which contains an object table. The central part contains the pole shoes of the magnetic lens and the aperture stop. The lower part is the actual object lens tube and contains the stigmator and the selective stop. The object table is movable and permits a turning and tilting of the object. Next, the mechanical facilities of the instrument, serving for the adjustment of the various elements of the object lens are described. Also modes of employment of the object lens for reflecting and diffraction pictures are described. The intermediate and projecting lenses are housed in a block. Their auxiliary elements are described. Tube and three observation windows and the camera are contained in the lower part of the microscope. The vacuum system of the instrument consists of a mechanical vacuum pump RVN-20 and a diffusion pump TSVL-100. There are 6 figures and 5 references, 3 of which are Soviet.

Card 2/2

9.3140 (also 1003, 1140)

S/120/60/000/004/014/028
E032/E414

AUTHORS: Stoyanov, P.A., Mikhaylovskiy, G.A., Bertyn, A.R., Grishina, N.M. and Moseyev, V.V.

TITLE: The Universal High-Resolution Electron Microscope УЭМВ-100 (UEMV-100)

PERIODICAL: Pribory i tekhnika eksperimenta. 1960. No.4 pp.110-117

TEXT: A description is given of an electron microscope having a nominal resolution of 10 Å.   It incorporates a focusing corrector, a deflecting system for work by reflection, a binocular viewer, a specially-designed vacuum chamber and various other features. This microscope presents an improved version of the microscope UEMV-100.   The microscope column incorporates 5 lenses, namely 2 condensers, 1 objective, 1 intermediate lens and 1 projection lens.   The aim of the modifications and improvements was to improve the electron-optical characteristics of the UEMV 100 microscope.   In particular, a special focusing corrector was introduced between the second condenser and the objective.   This corrector is in the form of two pairs of coils placed outside the vacuum chamber, one above the other.   The coils are located in special grooves cut into the body and separated from the evacuated Card 1/4

87375
S/120/60/000/004/014/028
E032/E414

The Universal High-Resolution Electron Microscope UEMV-100
(UEMV-100)

space by thin walls.   The coil windings are supplied with
alternating current, consisting of symmetri. re.tangular pulses
Currents in the upper and lower pairs of coils are 180° out of phase
so that the fields produced by these coils are in opposite
directions.   The focusing corrector serves to increase the
aperture of the illuminating system (Dorsten et al, Ref.3)   In
the present case the aperture angle is increased in one plane
At the same time the depth of focus is reduced so that precise
focusing of the image is easier to establish.   The corrector is
particularly convenient in the case of relatively small electron
optical magnifications with subsequent high magnification of the
photographs.   When the corrector is switched on the image if not
accurately focused, divides into two parts.   The conditions under
which this "doubling" disappears correspond to precise focusing.
The paper is concluded with a general description of various other
modifications including a special specimen table which can be used
to select any given part of the specimen even under overall

Card 2/4

87375

S/120/60/000/004/014/028
E032/E414

The Universal High-Resolution Electron Microscope УЭМВ-100 (UEMV-100)

magnifications of 1.5×10^6; a binocular viewing arrangement having a magnification of x6 and a relatively large field of view (diameter 28 mm), and the pumping system of the microscope. Acknowledgments are expressed to Yu.M.Kushnir for assistance. There are 11 figures and 5 references: 3 Soviet and 2 non-Soviet.

SUBMITTED: July 4, 1959

Card 3/4

S/120/60/000/004/014/028
E032/E414

The Universal High-Resolution Electron Microscope УЭМВ-100
(UEMV-100)
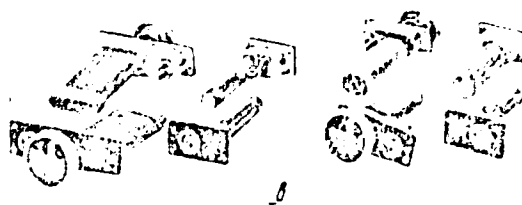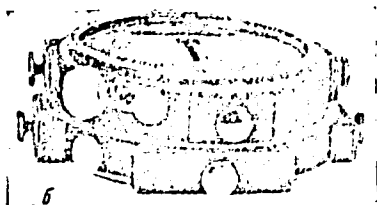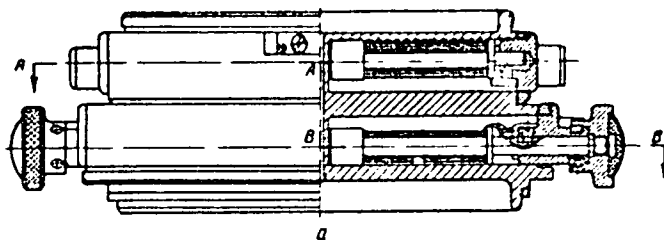
Рис. 2. Корректор фокусировки. а — конструкция, б — внешний вид, в — отклоняющие катушки: справа — для корректора фокусировки, слева — для работы на отражение

Card 4/4

KABANOV, A.N.; MIKHAYLOVSKIY, G.A.; SVIRIDOV, A.M.

Features of using electron guns of electron microscopes at high currents.
Radiotekh. i elektron. 9 no.8:1470-1475 Ag '64.   (MIRA 17:10)

L 44226-66   EWT(1)
ACC NR: AP6024635   SOURCE CODE: UR/0170/66/011/001/0022/0029

AUTHOR: Mikhaylovskiy, G. A.

ORG: Institute of Water Transportation, Leningrad (Institut vodnogo transport)

TITLE: The problem of evaporative cooling of gases

ABSTRACT: Cooling of gases in a pipe flow or during compression by means of liquid injection (evaporative cooling) leads to certain peculiarities in the behavior of the fluid. Due to the absorption of heat by the evaporating liquid, the properties of the gas or vapor vary considerably which is reflected by the change in the adiabatic exponent k. This problem was theoretically analyzed, and it was shown that k can change from 0 to ∞ depending on the intensity of evaporation. Three expressions were derived for k (k_1, k_2, k_3) for processes in which p,V; T,V; or T,p are independent pairs of variables. The local values of $k_1, k_2,$ and k_3 were plotted as functions of the intensity of

Card   1/2   UDC: 533.6

L 44226-66
ACC NR: AP6024635

evaporation when water is injected. The overall results showed that evaporative cooling may lead an unusual behavior of the fluid, i.e., during compression the pressure may decrease, resulting in a decrease in the flow velocity. Orig art. has: 4 figures and 13 formulas.   [PV]

SUB CODE: 20,21 / SUBM DATE: 28Jun65 / ORIG REF: 002 / OTH REF: 001

mt
Card   2/2

USSR/Engineering - Compressors,   May 52
            Processes

"On the Compression of Air With Cooling by Water Injection," G. A. Mikhaylovskiy, Cand Tech Sci, LIIVT (Leningrad Inst of Water Transport Engineers)

"Iz v-s Teplotekh Inst" No 5, pp 12-16

Studies compression process of satd air, contg water particles in suspension, using JS diagram of satd air. Discusses heat capacity in compression process, adiabatic index, and compression work in compressor. Represents all relationships in graphical form.

231T38

MIKHAYLOVSKIY, G. A.

MIKHAYLOVSKIY, G. A., SADOVENKO, V. V.

Marine Engineering

Examination of the performance of the oil traps on vessels of the type "Akademik
Vavilov." Rech. transp. 12 no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

MIKHAYLOVSKIY, G.A., kand.tekhn.nauk, dotsent

Method of calculating and constructing a united i-s diagram for
steam and a steam-air mixture. Trudy LIVT no.26:169-175 '59.
(MIRA 14:9)

(Steam)

67646

/0.4000   SOV/96-60-1-15/22

AUTHOR: Mikhaylovskiy, G. A., Candidate of Technical Sciences

TITLE: The Thermo-dynamic Basis for the Construction of Entropy
           Diagrams for Steam-gas Mixtures

PERIODICAL: Teploenergetika, 1960, Nr 1, pp 69-75 (USSR)

ABSTRACT: In general, the condition of a steam-gas mixture is
          determined by three independent variables, so that
          analytical methods of calculation are complicated.
          Therefore, entropy diagrams for such systems are much
          needed, but cannot be constructed in one plane because
          there are three variables. Previous attempts to resolve
          this difficulty have resulted in diagrams that are
          inconvenient in use. However, if the steam-gas mixture
          is considered as an ideal gas and use is made of certain
          latent properties of entropy diagrams, then a diagram can
          be constructed in one plane. The principles of construc-
          tion of such diagrams are that the enthalpy of an ideal
          gas does not depend on the pressure and entropy is
          usually reckoned from some nominal condition, which may
          be chosen arbitrarily. When diagrams have been constructed,
          the plotted values of entropy serve only to express the
          scale. Therefore, they may also be used to express the

Card 1/4

67646

SOV/96-60-1-15/22

The Thermo-dynamic Basis for the Construction of Entropy Diagrams
for Steam-gas Mixtures

entropy when any particular parameter, for example,
pressure, is changed at a given point. It suffices to
suppose that the origin of the diagram is altered. Thus
a given point on the diagram may represent conditions
that differ in respect of pressure. This in its turn
means that in constructing the diagram one of the
parameters may be fixed and this need not be the pressure.
The principle that enthalpy is independent of pressure
has to be used in different ways for different sets of
conditions. The three characteristic regions that are
distinguished in constructing the enthalpy diagrams
for steam-gas mixtures are: quantities of steam in the
mixture not greater than 20% by weight; high steam-content
at temperatures below the critical temperature; and
temperatures above the critical temperature. A special
diagram is constructed for each of these three regions,
and all the diagrams can be constructed for any gas with
the vapour of any liquid, though the usual ones are air
Card 2/4   and steam. In order to extend the field of application

SOV/96-60-1-15/22

The Thermo-dynamic Basis for the Construction of Entropy Diagrams
for Steam-gas Mixtures

of diagrams of the first two types, it is necessary to
extend the concept of relative humidity somewhat,
employing the definition given in expression (2). The
significance of this is explained by a numerical example,
and Fig 1 shows curves of changes in relative humidity
as functions of temperature at constant pressure and
constant proportion of steam by weight. In order to
construct the entropy diagrams for steam-gas mixtures in
one plane it is necessary to reduce the number of
independent variables by one, which is done by fixing one
of the parameters. For the first and second regions,
where the temperature is below the critical value, it is
convenient to fix the relative humidity. An entropy
diagram for moist air in the first region is plotted in
Fig 2. This diagram is simple and easy to use and has
an extensive field of application. A combined entropy
diagram for water vapour and a steam-air mixture is
plotted in Fig 3, and this can be used to make all kinds
of calculations on steam-gas mixtures at high steam-
Card 3/4 concentration. The construction of entropy diagrams for

67646

AUT/96-60-1-15/22

The Thermo-dynamic Basis for the Construction of Entropy Diagrams
for Steam-gas Mixtures

temperatures above the critical value is then described
and such a diagram is plotted in Fig 4. The method of
using it is explained. It is constructed for a single
pressure and the way of allowing for this is explained.
The diagram is particularly useful when the composition
of the gas in the steam-gas mixture is the same in
different calculations and only the amount of it in the
mixture varies. Variations in the composition of the gas
cause changes in the relationship between the specific
heat and the temperature, so that the diagram gives
erroneous results, though corrections can be made by
special graphs. However, in such cases it is better
to construct further diagrams, to allow for the change
in composition of the gas. The principles described in
this article may be used to construct such a universal
diagram, which may be applicable not only to steam-gas
mixtures but also to combustion products of fuel, and is
simpler than other available diagrams. There are 4 figures,
and 6 Soviet references.
ASSOCIATION: Leningradskiy institut vodnogo transporta (Leningrad
Institute of Water Transport).

Card 4/4

27919

//. 5300

AUTHOR: Mikhaylovskiy, G.A., Candidate of Technical Sciences

TITLE: An I-S (enthalpy-entropy) diagram for air and
             combustion products

TEXT: The condition of a mixture of gases depends upon two
thermodynamic parameters and upon the quantitative analysis of the
mixture; thus it is a function of many independent variables.
The influence of the composition of the mixture on its thermo-
dynamic properties may be expressed with sufficient accuracy by the
quantitative composition factor of the mixture β, (see for
example Ref.2 (Lutz and Wolf, I-S Tafel für Luft und
Verbrennungsgase, 1938) and Ref.4; (S.L. Rivkin, VTI. Gosenergoiz-
dat, 1955). The coefficient β governs the value of the molar
specific heat according to the gas composition.

$$\mu c_p = f_1(t) + \beta f_2(t) \tag{1}$$

Card 1/ 9

27919

S/096/61/000/011/006/006

An I-S (enthalpy-entropy) diagram..E194/E155

where: $f_1(t)$ and $f_2(t)$ are temperature functions which are the same for all gases. Assuming for air an arbitrary value of $\beta = 1$, and for pure combustion products without excess air a value of 1.5, we may find expressions for $f_1(t)$ and $f_2(t)$ and consequently also for β in terms of the specific heats of air and of the pure combustion products. In this way the physical meaning of the coefficient β can be seen. The following expression is then derived:

$$\mu c_p = \mu c_{pB} + 2(\beta - 1) (\mu c_{pH} - \mu c_{pB}) \tag{2}$$

where the suffix H refers to combustion products and the suffix B refers to air. The coefficient β is calculated from formula (19) of Ref.4 [Abstractor's note: Ref.14 mentioned but apparently incorrect]. If in formula (2) we substitute true molar specific heat and integrate between appropriate limits, we obtain an expression for the enthalpy of the mixture at the given temperature as a function of one parameter, β.

$$I = I_B + 2(\beta - 1) (I_H - I_B) \tag{3}$$

Card 2/9

An I-S (enthalpy-entropy) diagram.... S/096/61/000/011/006/006
27919
E194/E155

where I_B and I_H are the enthalpies of one mole of air and of the combustion products of normal hydrocarbon without excess air. Strictly speaking, a device of this kind cannot be used to obtain a formula for the calculation of entropy, because the actual entropy of a mixture is greater than that calculated from the simple rule of mixing by an amount equal to the entropy of mixing given by the following equation:

$$\Delta S_{CM} = -1.9858 \sum r_i \ln r_i$$

(4)

where r_i is the volumetric or molar proportion of the i-th component of the mixture. If it is assumed that the origin from which the entropy of the gas mixture is reckoned is displaced by an amount equal to the entropy of mixing, which does not depend on β, a formula for calculating entropy may be obtained in the same way as that for enthalpy, provided that the components are at the same pressure and temperature both before and after mixing. In this way the following expression is obtained:

$$S = S_B + 2(\beta - 1)(S_H - S_B)$$

(5)

Card 3/9

27919

An I-S (enthalpy-entropy) diagram ...   S/096/61/000/011/006/006
E194/E155

Numerical values of enthalpy and entropy for each value of β may
be taken from the table of Ref.4 for temperatures up to 1100 °C or
may be calculated by means of formulae (3) and (5) using tables of
the thermodynamic properties of gases. It will be seen that by
using the coefficient β and displacing the origin for entropy
the number of variables has been reduced to three and it is
necessary to reduce them to two in order to plot curves. Correct
selection of the parameter to maintain constant is most important.
In the diagram of Lutz and Wolf (Ref.2) the principal curves are
suitable only for dry air and so the diagram is constructed for a
constant value of $\beta = 1$. However, to maintain β constant does
not fully satisfy present requirements and it is better to make
the pressure constant. Then the enthalpy and entropy corresponding
to the conditions at the given point (with the set temperature for
which the diagram was constructed) may correspond to the condition
at other pressures, provided that the influence of pressure on the
specific heat can be neglected. In order to represent on the
diagram a number of conditions of different mixtures, lines of
constant β must be constructed on it. Essentially they
represent isobars for one and the same pressure for gases of
Card 4/9

An I-S (enthalpy-entropy) diagram   27919
S/096/61/000/011/006/006
E194/E155

different quantitative composition. Thus the I-S diagram for air
and combustion products may be constructed for a constant pressure
of 1 atm and for 1 mole of gas mixture. The graph must contain
curves for the isotherms, the isochores and lines of β = constant.
At pressures of above 1 atm there is an error but it is negligible
and does not exceed 0.5% at pressures up to 25-30 atm. A diagram
of this kind can be used to calculate all the thermal processes
encountered in practice. It is necessary to have only one
auxiliary curve corresponding to ΔS_p = 1.986 ln π, where π is
the degree of change of pressure in the process, equal to the ratio
of the maximum to the minimum pressure. This curve is plotted
directly on the diagram. The complete diagram is illustrated in
Fig.2 for air and combustion products over the most commonly used
range. The y-axis gives enthalpy in kcal/mole and the x-axis
entropy in kcal/mole degree; the inscription against V_0 reads
m^3 per mole. The method of use is as follows. At the point of
intersection of the line β = constant with the isotherm for the
given temperature, we find the enthalpy I and the volume of the
combustion products V_0 at a pressure of 1 atm and the given
temperature. The actual volume of a mole at the given pressure p
Card 5/ 9

27919
An I-S (enthalpy-entropy) diagram S/096/61/000/011/006/006
E194/E155

is V_o/p.   If the process is isobaric, the given quantity of heat
Q kcal/mole is laid out on the vertical from the initial point of
the process. Allowance is made for the sign on the line of
β = constant to determine the final composition. In an isochoric
process the amount of heat is first multiplied by the adiabatic
index and the product, kQ, is laid out as in the isobaric process.
At the final point the temperature T_2 is found and the final
pressure $p_2 = p_1 \times T_2/T_1$ is calculated. The value of the
adiabatic index is found from Fig.3 as a function of β and the mean
temperature of the process. Calculation of adiabatic processes is
based on the circumstance that the entropy does not increase. With
known pressures at the start and end of the process ΔS_p is first
taken from the curve of $\Delta S_p = f(\pi)$, starting from point A on
Fig.2.   This value is laid out horizontally to the left for
expansion and to the right for compression. Proceeding vertically
from the point obtained, intersection with the required curve of
β = constant (point B) indicates values of I_2, T_2, and V_{o2}
and between points A and B the value ΔI.

Card 6/ 9

27919

S/096/61/000/011/006/006

An I-S (enthalpy-entropy) diagram E194/E155

The final volume of a mole is found again by dividing V_o by p.
A somewhat different procedure is required if the degree of
expansion or compression is given instead of π. The I-S
diagram proposed unites the positive features of the two best
existing methods of graphical calculation, namely Lutz and Wolf's
diagram of state and Rivkin's diagram of thermodynamic properties.
The new diagram is very simple in use and it can easily be
constructed in each particular case. It is only necessary to
make one curve of β = constant for the given composition of gas
and a curve of $\triangle S_p = f(\pi)$, choosing a scale to suit the degree
of accuracy required.
There are 3 figures and 5 references: 4 Soviet-bloc and
1 non-Soviet-bloc.

Card 7/9

MIKHAYLOVSKIY, Georgiy Andreyevich; ZYSIN, V.A., kand. tekhn. nauk, retsenzent; ARNOL'D, L.V., prof., red.; MITARCHUK, G.A., red. izd-va; POL'SKAYA, R., tekhn. red.

[Thermodynamic analysis of processes in steam-gas mixtures] Termodinamicheskie raschety protsessov parogazovykh smesei. Moskva, Mashgiz, 1962. 183 p.   (MIRA 15:6)
                    (Thermodynamics)

MIKHAYLOVSKIY, G.A., kand.tekhn.anuk

Thermodynamic processes of steam-gas mixtures. Teploenergetika
9 no.5:92-95 My '62. (MIRA 15:4)
(Thermodynamics)

SEVAST'YANOV, N.S.; SABUROV, V.P.; MIKHAYLOVSKIY, G.N.

Unit for studying the heat resistance of metals in the system iron - carbon. Zav. lab. 30 no.10:1282-1283 '64. (MIRA 18:1)

1. Omskiy politekhnicheskiy institut.

MIKHAYLOVSKIY, G. P.

MIKHAYLOVSKIY, G. P. -- "Interoceptive Effects on Certain Functions of the Central Nervous System, Resulting From Irritation of the Mechanoceptors of the Gastrointestinal Tract." Sub 29 Jan 52, Central Inst for the Advanced Training of Physicians. (Dissertation for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva   January-December 1952

MIKHAYLOVSKIY, O.P., podpolkovnik meditsinskoy sluzhby, kandidat meditsin-
skikh nauk

Functional test for detecting latent cardiovascular insufficiency.
Voen.-med. zhur. no.3:84-85 Mr '56.   (MLRA 9:9)
        (CARDIOVASCULAR SYSTEM--DISEASES)

MIKHAYLOVSKIY, G.P. (Moskva)

Data on the effect of stimulation of interoceptors of the gastro-
intestinal system on unconditioned defense reflexes. Report no.1:
Relation of effects from interoceptors to the nature of the stimulus.
Biul.eksp.biol.med. 42 no.7:13-18 Jl '56.   (MLRA 9:9)

1. Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.
          (GASTROINTESTINAL SYSTEM, physiology.
               eff. of mechanical stimulation on unconditioned defense
          reflex (Rus))
     (REFLEX,
          unconditioned defense, eff. of mechanical stimulation of
     gastrointestinal system (Rus))

GEL'MAN, B.L., kand.med.nauk, MIKHAYLOVSKIY, G.P., podpolkovnik med.sluzhby
kand.med.nauk., BASOVA, R.M.,

Comparative description of methods for studying gastric secretion.
Voen-med.zhur. no.8:32-36 Ag '56   (MIRA 12:1)
            (STOMACH--SECRETIONS)

MIKHAYLOVSKIY G.P.

USSR/Human and Animal Physiology - Nervous System.   R-12

Abs Jour   : Referat Zhur - Biol., No 16, 1957, 71101

Author   : G.P. Mikhaylovskiy,
Title   : Data on the Effect of the Stimulation of the Interoceptors
             of the Digestive Tract on the Unconditioned Defense
             Reflex. Report 2. Effect of the Stimulation of the Mecha-
             noreceptors of the Digestive Tract in Different Functional
             States of the Cerebral Cortex.

Orig Pub   : Byul. eksper. biol. i meditsiny, 1956, 42, No 9, 6-11

Abstract   : The inflation of an isolated part of the small intestine
             or stomach in dogs (chronic tests) produced an insignifi-
             cant inhibition of the unconditioned defense reflex.
             After an emotional excitation (in cats) or subcutaneous
             injection of 0.5-1 ml 10% solution of caffeine, the inhi-
             bitory influence of mechanocenters of the stomach-intes-
             tinal tract increased (which is related to the increase
             of the irritation process in the cerebral cortex, and af-
                                                              ter

Card 1/2   - 70 -

USSR/Human and Animal Physiology - Nervous System.   R-12

Abs Jour   :   Referat Zhur - Biol., 1957, 71101

large doses of caffeine- became weaker. Within a few
days following daily administrations of Br (10 days-
1 gm) there began to appear the stimulating influence
of the mechanocenters irritation on the defense reflex,
which is connected with the strengthening and concentra-
tion of the inner inhibition process in the cortex.

Part 1- look RZHBiol. 1957, 33697

Card 2/2   - 71 -

ROSIN, Ya.A., prof.; MIKHAYLOVSKIY, O.P., kand.med.nauk, podpolkovnik medi-
tsinskoy sluzhby; SUVOROV, P.H., kandmed.nauk, kapitan meditsinskoy
sluzhby

Effect of radial acceleration on flying personnel with neurocirculatory
dystonia of the hypertensive type. Voen.-med.zhur. no.8:58-62 Ag '59.
(MIRA 12:12)

(ACCELERATION effects)
(NEUROCIRCULATORY ASTHENIA physiol.)

S/030/62/000/012/003/003
D036/D114

AUTHOR: Mikhaylovskiy, G.P., Candidate of Medical Sciences

TITLE: Some results of the development of space biology

PERIODICAL: Vestnik Akademii nauk SSSR, no. 12, 1962, 105-106

TEXT: Soviet research in space biology was summarized at a session held by the
Otdeleniye biologicheskikh nauk Akademii nauk SSSR (Department of Biological
Sciences of the Academy of Sciences of the USSR) on October 1-2, 1962, and opened
by N.M. Sisakyan, Academician-Secretary of the Department, to commemorate the
5th anniversary of the launching of the first artificial satellite. The follow-
ing subjects were discussed: Sisakyan: the effect of extreme flight factors on
living organisms, the development of biological fundamentals for space flights
and life on planets, and conditions and forms of extraterrestrial life.
V.I. Yazdovskiy and O.G. Gazenko: research done during the "Vostok" flights.
Yu.M. Volynkin and P.P. Saksonov: the biological effect of space flight factors.
Saksonov, V.V. Antipov, and N.N. Dobrov: the proven freedom from radiation
hazards of short orbital flights beneath the radiation belts. A.V. Lebedinskiy

Card 1/3

S/030/62/000/012/003/00J
D036/D114

Some results of ......

and Yu.G. Nefedov: the effect of prolonged small doses of ionizing radiation in
view of experimental data which show that, due to the complex action of cosmic
radiation and other factors, the reactivity of various systems of a living orga-
nism changes. Gazenko, I.T. Akulinichev, and R.M. Bayevskiy: splitting biolo-
gical telemetry into (a) constant medical supervision, (b) medical research into
specific reactions, (c) biological indication. Ya.A. Vinnikov, B.B. Yegorov
and Gazenko: vestibular disturbances during weightlessness at many levels, in-
cluding the cellular and molecular levels, where Yegorov and Gazenko studied
this problem using microelectrodes. Lebedinskiy: methods for evaluating the
reactivity of the vestibular analysor based on a study of the effect of positive
and negative angular accelerations of various magnitudes on the vestibular-
vegetative reflexes; Titov's complaints of "sea-sickness" during weightlessness.
N.N. Gurovskiy,M.D. Yemel'yanov and Ye.A. Petrov: the possibility and mechanism
of adaptation of the vestibular analysor. A.D. Seryapin and V.P. Dzedzichek:
regeneration of air in a space craft by photolysis of CO_2 or electrolysis of H_2O
for long space flights. A.A. Nichiporovich and V.Ye. Semenenko: so-called

Card 2/3

S/030/62/000/012/003/003
D036/D114

Some results of .....

closed ecological system which will be necessary for long space flights or for a
stay on another planet. A.F. Kleshnin: increasing the productivity of chlorella.
A.I. Oparin: theories on the possibility of extraterrestrial life which should
be based on a study of the general process of the development of matter, so as to
establish whether life could have arisen during evolution of the given planet.
The session noted the widening scope of space biology. Reports were also delivered
on adynamy, artificial hybernation, engineering psychology, gravity and the brain's
blood supply, physiological speech research in order to create automatic speech
recognition systems, the effect of space flight on hereditary structure, and other
subjects.

Card 3/3

MIKHAYLOVSKIY, G.P., kand.med.nauk

Some results of the development of cosmic biology. Vest.AN SSSR
32 no.12:105-108 D '62.

(Space biology—Congresses)   (MIRA 15:12)

ACCESSION NR: AT4042642   S/0000/63/000/000/0006/0008

AUTHOR: Akulinichev, I. T.; Bayevskiy, R. M.; Belay, V. Ye. Vasil'yev,
P. V.; Gazenko, O. G.; Kakurin, L. I.; Kotovskaya, A. R.; Maksimov, D.
G.; Mikhaylovskiy, G. P.; Yazdovskiy, V. I.

TITLE: Results of physiological investigations aboard the "Vostok-3" and
"Vostok-4" spaceships

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963.
Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine);
materialy* konferentsii. Moscow, 1963, 6-8

TOPIC TAGS: biomedical monitoring, electrooculogram, pneumogram/Vostok-3,
Vostok-4, EEG, EKG

ABSTRACT: A number of physiological indices were monitored during the
tandem spaceflights of Nikolayev and Popovich (Vostok-3 and Vostok-4). New
procedures used for the first time on these flights and improvements of exist-
ing equipment yielded a great deal of physiological information. Weightless-
Card · 1/8 ᵤ

ACCESSION NR: AT4042642

ness had no noticeable effect on the functional state of the CNS in either cos-
monaut, as evaluated on the basis of performance of various tasks. EEG's
showed a dominance of comparatively high-amplitude rhythms with a frequency
of 5 to 7 cps, similar to those observed in athletes after intense physical
exertion, during the first hours of weightlessness. Later a gradual shift
toward beta-rhythms with a reduced mean amplitude of EEG biopotentials
occurred. Heightened emotional stress in the first hours of flight and before
reentry was reflected in decreased electrical resistance of the cortex.
Functional stability of the higher involuntary nervous centers is indicated by
the maintenance of normal daily variation of cortical resistance--higher at
night, lower during the daytime--during the rest of the flights. EOG's
(electrooculograms) were used as an index of the functional state of the
vestibular apparatus. Asymmetries in oculomotor reaction, which could have
indicated disturbances of the vestibular centers, were not observed in either
cosmonaut. Vestibular tests not supplemented by EOG's also failed to yield
any evidence of vestibular disturbance. Oculomotor activity was also used
as an index of general and motor activity. Variations in oculomotor activity
had a phase character. At the beginning of the flight Nikolayev, and to

Card 2/5

ACCESSION NR: AT4042642

a lesser degree Popovich, showed an increase of oculomotor activity up to 4
to 6 eye movements per second. Eye movements of an uncoordinated character,
of both large and small amplitude, were recorded. On the 6th and 7th orbits
eye movement fell off, and later EOG's show periodic increases and decreases
in oculomotor activity. Toward the end of the flight a second stable increase
in oculomotor activity occurred, but its level was lower than at the beginning
of the flight. Cardiac activity was monitored by EKG's (using chest leads).
Increased pulse rates (from 98 to 112 for Nikolayev, and from 94 to 136 for
Popovich) occurred immediately before launch, with corresponding shortening
of the PQ and QT intervals. EKG changes during the powered-flight phase
were similar to those observed in ground experiments with centrifuging. The
maximum pulse rate during the first minute of flight was 136 for Nikolayev and
132 for Popovich. Normalization of pulse rates to the rates observed 4 hr
before launch took place on Nikolayev's 6th and 7th orbit and on Popovich's
3rd to 4th orbit. Normalization of pulse to initial rates took 5 to 10 min dur-
tests. No IKG changes indicating disturbances of automatism, excitability, or
conductivity were observed. In flight Popovich registered 3 separate extra

Card 3/5

ACCESSION NR: AT4042642

systoles; this had also occurred during training tests. The character of daily
variation of cardiac activity remained unchanged. Pneumographic data revealed
no respiratory irregularities. Some increase in respiration rate was noted
during the powered-flight phase; this had also been observed during centrifuge
tests. No pathological change in physiological functions of either cosmonaut
was observed during flight. During the powered-flight phase, functional shifts
similar to those observed during centrifuge tests occurred. Definite changes
in the functional state of various physiological systems took place during the
first hours of orbital flight, as indicated by the inhibition of pulse-rate norm-
alization and the character of EEG and cortical resistance changes. Changes
in the character of EEG's during prolonged (3 to 4 days) weightlessness in-
dicate shifts in the interaction of excitation-inhibition processes in the higher
levels of the CNS. However, the mental activity and neuro-regulatory
functions of the cosmonauts remained at a high level.

ASSOCIATION: none

Card 4/5

Submitted 27 Jan 63

MIKHAYLOVSKIY, G.P.

Session of the Department of Biological Sciences of the Academy of Sciences of the U.S.S.R. dedicated to the fifth anniversary of the launching of the first artificial satellite. Izv. AN SSSR, Ser. biol. 28 no.1:152-156 Ja-F'63.

(MIRA 16:8)

(SPACE BIOLOGY—CONGRESSES)

VOLYNKIN, Yu.M.; YAZDOVSKIY, V.I., prof.; GENIN, A.M.; GAZENKO, O.G.; GUROVSKIY, N.N.; YEMEL'YANOV, M.D.; MIKHAYLOVSKIY, G.P.; GORBOV, F.D.; SERYAPIN, A.D.; BAYEVSKIY, R.M.; ALTUKHOV, G.V.; KOPANEV, V.I.; KAS'YAN, I.I.; MYASNIKOV, V.I.; TERENT'YEV, V.G.; BRYANOV, I.I.; FEDOROV, Ye.A.; FOMIN, V.S.; ARUTYUNOV, G.A.; ANTIFOV, V.V.; KOTOVSKAYA, A.R.; KAKURIN, L.I.; TSELIKIN, Ye.Ye.; USHAKOV, A.S.; VOLOVICH, V.G.; SAKSONOV, P.P.; YEGOROV, A.D.; NEUMYVAKIN, I.P.; TALAPIN, V.F.; SISAKYAN, N.M., akademik, red.; KOLPAKOVA, Ye.A., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[First group space flight; scientific results of medical and biological studies carried out during the group orbital flight of manned satellites "Vostok-3" and "Vostok-4] Pervyi gruppovoi kosmicheskii polet; nauchnye rezul'taty mediko-biologicheskikh issledovanii, provedennykh vo vremia gruppovogo orbital'nogo poleta korablei-sputnikov "Vostok-3" i "Voskot-4." Moskva, Izd-vo "Nauka," 1964. 153 p.
(MIRA 17:3)

L 31990-66   ENT(1)   SCTB   DD/GD

ACC NR: AT6012899   SOURCE CODE: UR/0000/65/000/000/0215/0228

AUTHOR: Volkov, A.A.; Denisov, V.G.; Kirilenko, Yu. I.; Mankevich, V.I.; Mel'nik, S.G.; Mikhaylovskiy, G.P.; Onishchenko, V.F.

ORG: none

TITLE: The structure of the command signal and the psychophysiological capabilities of an operator in control while subjected to G force

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 215-228

TOPIC TAGS: man machine communication, automatic control theory, human engineering, biologic gravity effect, flight physiology, psychologic stress

ABSTRACT: Circuits containing a man-operator as one of their elements are extensively used in modern control systems. The case studied involves the control of the pitch of an aircraft in descent prior to landing. An experimental investigation is made of the psychophysiological characteristics of an operator during control under conditions of G force acting in the chest-back direction. It is found that with a G force below a certain limit, the operator is capable of controlling angular and trajectory movements if he receives a single control command. The structure of the control command should be identical with the principle of control of an automatic system; furthermore, a correction should be made in the

Card   1/2

L 31990-66

ACC NR: AT6012899

command system, i.e., the dynamic properties of the operator should be corrected. Optimal structure of the control command may be selected by methods employed for automatic control systems. The quality of the control is considerably affected by its dynamic characteristics, by the preparation and the training of the operator, by perturbation factors, and by the organization of the working place of the man-operator. According to data obtained with the polyeffector method of recording   physiological functions, an increase in G force acting on the man-operator leads to the execution of control functions which are unchanged in capacity at a high neuropsychic stress and at a lowered performance. The polyeffector method makes it possible to determine the neuropsychic activity of the operator under G force more fully. An objective evaluation of the processes employing the man-operator in the control circuit may be obtained as a result of   analysis of the parameters of the motion dynamics of the controlled plant, the actions of the operator, and the degree of the operator's psychophysiological stress. Orig. art. has: 12 figures and 18 formulas.

[08]

SUB CODE: 05 / SUBM DATE: 02Aug65 /   ATD PRESS: 5/02/

Card 2/2

ACC NR: AT6036558   SOURCE CODE: UR/0000/66/000/000/0162/0163   7

AUTHOR: Yegorov, P. I.; Dupik, V. S.; Yermakova, N. P.; Korotayev, M. M.; Kochina, Ye. N.; Mikhaylovskiy, G. P.; Neumyvakin, I. P.; Petrova, T. A.; Routova, M. B.; Filatova, L. M.; Tsyganova, N. I.; Yakovleva, I. Ya.

ORG: none

TITLE: The effect of hypokinesia and homogenized food rations on the functional state of the human organism [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 162-163

TOPIC TAGS: isolation test, hypodynamia, human physiology, space physiology, cardiovascular system, space nutrition

ABSTRACT: For a period of 7 days, four specially chosen healthy subjects 21--29 years old lay flat in bed under conditions of limited isolation. Two of the subjects received a special ration of homogenized foods, while the other two received a ration identical in calorie content (2200 kcal) and chemical composition, but prepared by ordinary cooking methods. Water consumption was unlimited.

Card 1/3

ACC NR: AT6036558

In the course of the experiment, respiratory-volume and vital capacity decreased in all subjects; the subjects receiving the special rations showed a more pronounced increase in oxygen consumption and consequently in basal metabolism level.

Cardiovascular system changes were seen in the EKG's of all subjects (decreased voltage of R and T peaks, bradycardia, and rotation of the axis to the right), and persisted more than 12 days after the experiment.

Hemodynamic studies using N. N. Savitskiy's method revealed a decrease in the speed of pulse wave propagation along arteries of the muscular type, and changes in peripheral resistance and blood minute volume. Disturbances of intranasal circulation were revealed by the rhinopneumometry method. These shifts in vascular tonus were more pronounced in the group receiving special food rations.

Following the experiment all the subjects exhibited orthostatic weakness, and in the two subjects receiving the special food ration, an active orthosta- tic test involving standing for 30 min induced collapse (on the 3rd and 23rd min of the test).

Card 2/3

ACC NR: AT6036558

Pronounced functional shifts of a transient nature were noted in the gastrointestinal tract (diminished gastric secretion after the experiment in the group receiving special rations; and changes in protein, carbohydrate, and cholesterin metabolism, and impairment of the bilirubin-excretory function of the liver in all subjects).

After the experiment all subjects showed a weight loss of up to 3350 kg, although disturbances of kidney function took the form of decreased diuresis, decreased creatinine clearance, and impaired water excretion during water loading tests.

Changes in mineral metabolism during the experiment consisted of increases in the blood plasma levels of potassium and calcium in all subjects, and toward the end of the experiment, decreased chlorides in the 24-hr urine of the subjects receiving special rations.

Audiometry revealed neurodynamic disturbances of the functional state of the auditory analyzer (asymmetry and elevation of differential thresholds of sound intensity and height).

A change was noted in the level of the dark adaptation curve. A considerable increase in light sensitivity in the 60th min was noted in the subjects receiving ordinary food, and a lesser increase in the subjects receiving special rations. Analysis of nyctograms taken during the initial , period of dark adaptation showed no substantial shifts. [W.A. No. 22; ATD Report 66-116

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

L 38525-65   EEC(b)-2/EWA(c)/EWT(1)/EWT(m)/EWP(b)/T/EWA(d)/EWP(x)/WP(t)   Pi-4
UR(o)   00/10/00
ACCESSION NR: AP5005290   8/0181/65/007/002/0496/0501

AUTHOR: Garber, R. I.; Drachinskiy, A. S.; Mikhaylovskiy, I. M.

TITLE: Direct observation of the restoration of a contact between fragments of a tungsten microcrystal

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 496-501

TOPIC TAGS: tungsten, recrystallization, microblock dispersion, crack evolution, autoionic microscope

ABSTRACT: This investigation was aimed at further confirmation of a hypothesis advanced by one of the authors previously (Garber, UFZh v. 1, 88, 1956; FTT, v. 2, 1089, 1960) that plastic deformation can be regarded, starting with a certain stage, as simultaneous dispersion of microblocks and restoration of contact between fragments. Using an auto-ionic microscope, the authors observed the formation of a crack in a single crystal of tungsten at liquid-nitrogen temperature, under the influence of the quenching stresses and of the force produced by an electric field. The evolution of the crack during the course of evaporation of a

Card 1/2

L 38525-65

ACCESSION NR: AP5005290

small number of atomic layers by the field is described in detail. It was observed that a "bridge" is formed spontaneously, followed by recrystallization accompanied by resumption of the continuity of the microcrystal. Similar recrystallization at low temperature within a relatively short time interval was observed in iron and nickel after low-temperature deformation (Garber et al, DAN SSSR v. 110, 64, 1956; FTT v. 2, 1096, 1960). The recrystallization is apparently accompanied also by relaxation of the stresses, thus causing an appreciable disordering of the crystal. The results seem to confirm the author's earlier hypothesis. Orig. art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 28Jul64   ENCL: 00   SUB CODE: SS

NR REF SOV: 006   OTHER: 002

Card 2/2

L 24131-66   EWT(1)/EWT(m)/T/EWP(t)   IJP(c)   JD/JG

ACC NR: AP6010970   SOURCE CODE: UR/0056/66/050/003/0520/0524

AUTHOR: Garber, R. I.; Afanas'yev, V. L.; Dranova, Zh. I.; Mikhaylov-
skiy, I. M.

ORG: Physicotechnical Institute, AN UkrSSR, (Fiziko-tekhnicheskiy
institut AN Ukrainskoy SSR)

TITLE: Low temperature recrystallization of tungsten microcrystals

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50,
no. 3, 1966, 520-524

TOPIC TAGS: low temperature, recrystallization, crystal dislocation,
grain structure, microcrystal, tungsten deformation

ABSTRACT: Tungsten deformed at liquid nitrogen temperature has been
investigated in a field ion microscope after being kept at room tem-
perature.   It is shown that new recrystallization centers may arise
at 600--700C in the deformed boundary region of the microcrystals.
The transverse size of the stable grain is 20--60Å at a disorienta-
tion angle of 8--10°.   The dislocation structure of the boundaries was
discussed.   Orig. art. has: 2 figures. [Based on author's abstract]
[NT]

SUB CODE: 20/   SUBM DATE: 06Aug65/   ORIG REF: 003/   OTH REF: 001

Card   1/1

L 3161-66   EWT(d)/FSS-2/EWT(1)/EWA(h).   GS/GW

ACCESSION NR: AT5014718   UR/0000/65/000/000/0117/0121   20

AUTHOR: Demin, E.A.; Chinenkov, L.A.; Mikhaylovskiy, I.P.; Chesnokov, A.F.   B+1

TITLE: Memory devices for systems of meteoric radiotelegraph communications

SOURCE: Operativnyye i postoyannyye zapominayushchiye ustroystva (Rapid and non-volatile storage); sbornik statey. Leningrad, Izd-vo Energiya, 1965, 117-121

TOPIC TAGS: meteoric communication memory, fast reading memory, slow recording memory, standby memory, radiotelegraphy

ABSTRACT: Proposed meteoric radiotelegraph communication links require buffer memories which make possible a continuous transfer of information over a discontinuous communication channel. The memory on the transmitter side should have a high reading rate and slow recording speed while the memory on the receiver side should operate in the reverse manner. The memory described in this article can carry out simultaneous recording and reading of information and can be started and stopped almost instantaneously. With a capacity of 900 code combinations it is relatively simple while, nevertheless, it causes only insignificant reductions in the communication channel transfer rate. It utilizes direct sampling and has five operating digits plus one control digit. Orig. art. has: 3 figures.

Card 1/2

L 3161-66

ACCESSION NR: AT5014718　　　　　　　　　　　　　　　　O

ASSOCIATION: none

SUBMITTED: 20Jan65　　ENCL: 00　　　　SUB CODE: DP, EC

NO REF SOV: 001　　　　OTHER: 001

Card 2/2 ud

L 20739-66   EEC(k)-2/EWA(h)/EWT(1)/EWT(m)/T/EWP(t)   IJP(c)   JD
ACC NR: AP6007538   SOURCE CODE: UR/0410/65/000/006/0028/0035

AUTHOR: Kostsov, E. G. (Novosibirsk); Mikhaylovskiy, I. P. (Novosibirsk)

ORG: none

TITLE: Thin-film capacitors and the possibility of using them in measuring
instruments   /8

SOURCE: Avtometriya, no. 6, 1965, 28-35

TOPIC TAGS: thin film capacitor, measuring instrument

ABSTRACT: Conventional thin-film capacitors, their construction and characteristics
are briefly described. Ta capacitors cannot be used successfully at frequencies
over 10 kc. Attention is drawn to the potentialities of Al-Al$_2$O$_3$ capacitors; al-
though Al capacitors are slightly larger because of lower ε of Al$_2$O$_3$, they have
these advantages: the nondissolving-electrolyte processing, which permits accurate
control of the oxide-film thickness; high electric strength of the oxide film;
simple method of spraying of Al film; good reproducibility of characteristics;
wide class of materials suitable for backings; time stability of characteristics.
These experimental curves

UDC: 681.20+621.319.4+539.238

Card   1/2

L 20739-66

ACC NR: AP6007538

are shown: specific capacitance vs. backing temperature (100—300C); electric
strength vs. oxide-film thickness; leakage-current density vs. applied voltage
(10—100 v). Al film capacitors are suitable for operation up to 10 or 20 Mc; their
temperature coefficient of capacitance is -200×10^{-6} per 1C within $-180 + 240C$. On
the strength of the above results, the Al thin-film capacitors are recommended for
use in electric measuring instruments. Orig. art. has: 6 figures, 1 formula, and
1 table.   [03]

SUB CODE: 09 / SUBM DATE: 07Aug65 / ORIG REF: 000 / OTH REF: 009

$ATD\ PRESS\ 4225$

Card 2/2

L 20740-66   EEC(k)-2/EWA(h)/EWT(1)/EWT(m)/T/EWP(t)   IJP(c)   JD

ACC NR: AP6007539   SOURCE CODE: UR/0410/65/000/006/0036/0044

AUTHOR: Vinogradov, M. G. (Novosibirsk); Mikhaylovskiy, I. P. (Novosibirsk);
Konyayev, S. I. (Novosibirsk); Kostsov, E. G. (Novosibirsk)

ORG: none

TITLE: Prospects for using thin-film diodes in measuring instruments

SOURCE: Avtometriya, no. 6, 1965, 36-44

TOPIC TAGS: semiconductor diode, thin film diode, measuring instrument

ABSTRACT: Three types of thin-film diodes are in use: (1) Diodes with space-
charge-limited current; (2) Diodes with oxide films whose functioning depends on
metal-oxide-boundary phenomena; (3) Heterojunction diodes. Their prinicpal char-
acteristics and the physical phenomena transpiring in them are discussed. The re-
sults of an experimental investigation of the second and third types with 0.01 and
0.0003 cm^2 active surface (9 diodes per cm^2) are reported. Current-voltage char-
acteristics of Ti-oxide-film diodes are shown; these diodes can operate at tempera-
tures up to 200C; their characteristics do not deteriorate with time (2.5 yrs). CdS
heterojunction diodes exhibit very steep characteristics; at 0.2—0.4 v, their for-
ward currents are considerable; at -3—4 v, their reverse currents are 10—40 micro-
amp. At temperatures over 100C, their reverse current rapidly increases. After
100 hrs of continuous operation, the forward current (initially 2 ma) increased by

Card 1/2   UDC: 681.20+621.382

L 20740-66

ACC NR: AP6007539

200—300%. Both tested types are recommended for use in measuring instruments where the measuring of very low (20 mv) voltages, high frequencies, and elevated ambient temperatures are involved. Orig. art. has: 6 figures. [03]

SUB CODE: 09/ SUBM DATE: 24Aug65/ ORIG REF: 005/ OTH REF: 001/ AID PRESS:4214

Card 2/2

POGULYAY, V.Ye.; LYA..., ..A.. MA..OV, ... M.KLA..OVA..., ..Ya.

Coatings on a base of epoxy resins for the protection of
equipment. Nefteper. i neftekhim. no.8:11-14 '64.
(MIRA 17:10.

1. Nauchno-issledovatel'skiy institut po transporti i khraneniyu
nefti i nefteproduktov.

YEMKOV, A.A.; KHMYLOVSKIY, I.Ya.

Investigating the stationary potential of steel in the presence of defects in an insulating film. Transp. i khran. nefti i nefteprod. (MIRA 18:8)
no.6:7-9 '65.

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu nefti i nefteproduktov.

(A) L 13080-66   EWT(m)/EWP(j)/T/EWP(t)/EWP(b)   JD/WB/WE

ACC NR: AP5028681   SOURCE CODE: UR/0318/65/000/011/0029/0032

AUTHOR: Pogulyay, V. Ye.; Gouik, A. A.; Mikhaylovskiy, I. Ya.

ORG: NIItransneft

TITLE: Corrosion of petroleum tanks and its control in the refineries of Bashkiria

SOURCE: Nefteпererabotka i neftekhimiya, no. 11, 1965, 29-32

TOPIC TAGS: corrosion, petroleum refinery equipment, protective coating, epoxide, gas corrosion, storage tank, corrosion rate, metal surface

ABSTRACT: To elucidate the mechanism governing the corrosive attack of the inner surface of a petroleum tank, use was made of a laboratory unit which simulated such corrosion under conditions of condensation and periodic wetting of the metal surface (St. 3 steel) by petroleum products in the presence of moisture, hydrogen sulfide, and atmospheric oxygen. It was found that the maximum corrosion rate takes place in the upper third part of the tank, where the ratio of the frequency of wetting of the wall by petroleum to the time of contact between the surface of the corroding metal and the air-gas mixture is the highest. To reduce the corrosion of the inner surface of the wall, petroleum from the dehydrating and desalting units should be cooled to the temperature of the surrounding air before being collected in the tanks. It is recommended that the inner walls be insulated with nonmetallic (epoxide-base) coatings. Engineer N. M. Samsonova and laboratory technicians I. M. Pinskaya and T. A. Kochankova participated in the experimental work. Orig. art. has: 3 figures.

Card 1/2   UDC: 621.175:620.197:665.013(470-52)

L 13080-66

ACC NR: AP5028681

SUB CODE: 11,13/ SUBM DATE: none / ORIG REF: 009 / OTH REF: 002

Card 2/2

YEMKOV, A.A.; MIKHAYLOVSKIY, I.Ya.

Device for plotting polarization curves. Zav.lab. 31 no.3:388-389 '65.
(MIRA 18:12)

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu nefti i nefteproduktov.

SOV/68-59-8-10/32

AUTHOR: Mikhaylovskiy, K.F. and Kozel', V.Ye.

TITLE: Signalisation of the Position of Coke on the Coke
             Wharf and the Position of the Quenching Wagon
             (Signalizatsiya zapolneniya koksovoy rampy i
             polozheniya tushil'nogo vagona)

PERIODICAL: Koks i khimiya, 1959, Nr 8, pp 23-25 (USSR)

ABSTRACT: Under conditions of bad visibility in the neighbourhood
             of the coke wharf, due to steaming, the discharge of
             freshly quenched coke on to the correct position on
             the coke wharf is often difficult. This becomes
             particularly important when the discharge of coke
             from the wharf is done automatically. On the
             Zhdanov   Works, a signalisation system was introduced
             which indicates the position of the quenching wagon
             and the position of free space on the wharf. The design
             and operation of the system is outlined and illustrated.
             There are 2 figures.

ASSOCIATION: Zhdanovskiy koksokhimicheskiy zavod (Zhdanov   Coking Works)

Card 1/1

KALUGIN, Y.A., MIKHAYLOVSKIY, K.F.

Automatic control of a coke sorting process dependent on the use of coke on the run;.

MIKHAYLOVSKIY, L. K.

Mikhaylovskiy, L. K. - "Investigation of Ferrites at a Frequency of Around 10,000 Megacycles with Transverse Magnetization." Min Higher Education USSR. Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov. Chair of the Theoretical Principles of Radio Engineering. Moscow, 1956 (Dissertation for the Degree of Candidate in Technical Sciences).

So: Knizhnaya Letopis', No. 10, 1956, pp 114-127

MIKHAYLOVSKIY, L. K., POLIVANOV, K. M. KOLMEY, Y. N.   and FABRIKOV, V. A.(Moscow)

"Magnetodielectrics in Waveguides," paper presented at the International
Conference on Physics of Magnetic Phenomena, Sverdlovsk, USSR, 22-31 May 1956

Mikhaylovskiy, L.K.

AUTHOR: Mikhaylovskiy, L.K.

TITLE: Investigation of Ferrite Characteristics (Issledo-
               vaniye parametrov ferritov)

ABSTRACT: This article describes the results of theoretical
               and experimental investigations of the electromagne-
               tic field structure in a wave guide filled up with
               a medium, which is characterized by the tensor of
               magnetic permeability.

               As a result of this investigation, it was found that
               in bounded gyromagnetic media there exist waves de-
               pending on the intensity of an additionally magneti-
               zing field (perpendicular to the axis of the wave
               guide).

               The experimental arrangement of this investigation
Card 1/3   was as follows: ferrite rings of various thicknesses

TITLE: Investigation of Ferrite Characteristics (Issledo-
              vaniye parametrov ferrito.)

              were placed into a round wave guide. The rings
              were made of ferrite of the "Oksifer-400" type
              with a diameter equal to the inner diameter of the
              wave guide, 26.8 mm. The ring thickness varied
              from 8.3 to 0.96 mm. The frequency of the waves
              applied was 9,590 megacycles.

              On the basis of these experiments was determined
              the dependence of the losses of electromagnetic
              energy flowing through the ferrite ring on the
              intensity of the magnetizing field and on the ring
              thickness. The results are presented graphically
              as families of curves shown in Fig. 1 and 2. It
              was found that in addition to the losses mentioned
              above, losses of resonance character were super-
              posed. The additional losses, originated because
Card 2/3   of the volume resonance, can be easily singled out.

TITLE: Investigation of Ferrite Characteristics (Issleo-
                vaniye parametrov ferritov)

                The bibliography lists 5 references, of which 2 are
                Slavic (Russian). The article contains 4 graphs.

INSTITUTION: Power Engineering Institute imeni V.M. Molotov in
                Moskva

PRESENTED BY:

SUBMITTED: No date

AVAILABLE: At the Library of Congress

Card 3/3

MIKHAYLOVSKIY, L.K., kand. tekhn. nauk

Matching of wave guide sections with air and binary fillings and
flat junctions. Trudy MEI no.31:225-233 '56   (MIRA 13:3)
     (Wave guides)

LOBOV, G.D.; MIKHAYLOVSKIY, L.K.

Gas-filled detector for centimeter and millimeter waves. Nauch.
dokl.vys.shkoly; radiotekh. i elektron.no.1:232-234 ' 58.
(MIRA 12:1)

1. Kafedra teoreticheskikh osnov radiotekhniki Moskovskogo
energeticheskogo instituta.
(Microwaves)

MIKHAILOVSKIY, L. K.

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow,

8-12 June. 1959

MIKHAYLOVSKIY, I. K.

SOV/4893

PHASE I BOOK EXPLOITATION

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam
ferritov i ferritakh osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fizicheskiye i fiziko-khimicheskiye svoystva. Doklady
(Ferrites; Physical and Physicochemical Properties. Reports)
Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted.
4,000 copies printed.

Sponsoring Agency: Nauchnyy sovet po magnetizmu AN SSSR. Otdel
fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: R. M. Sirota, Academician of the
Academy of Sciences BSSR; K. P. Belov, Professor; Ya. I. Kondor-
skiy, Professor; K. M. Polivanov, Professor; R. V. Telesnin, Pro-
fessor; G. A. Smolenskiy, Professor; N. N. Smolyarenko; and
Physical and Mathematical Sciences; N. N. Sholyavskiy; Tech.
L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech.
Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists,
radio electronics engineers, and technical personnel engaged in
the production and use of ferromagnetic materials. It may also
be used by students in advanced courses in radio electronics,
physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-
Union Conference on Ferrites held in Minsk, Belorussian SSR.
The reports deal with magnetic transformations, electrical and
ferromagnetic properties of ferrites, studies of the growth
of ferrite single crystals, problems in the chemical and physi-
cochemical analysis of ferrites, studies of ferrites having
rectangular hysteresis loops and multicomponent ferrite systems
exhibiting spontaneous rectangularity, problems in magnetic
attraction, highly coercive ferrites, magnetic spectroscopy,
ferromagnetic resonance, magneto-optics, physical principles of
using ferrite components in electrical circuits, anisotropy of
electrical and magnetic properties, etc. The Committee on Mag-
netism, AS USSR (S. V. Vonsovskiy, Chairman) organized the con-
ference. References accompany individual articles.

Card 16/18

Ferrites (Cont.)   SOV/4893

Shipitov, A. S. Ferromagnetic Materials for Lower
Frequencies of the SHF Range   530

Fabrikov, V. A. On the Effectiveness of the Operation of
Ferrite Components as SHF Mixers in Rectifying Systems   534

Ourevich, A. G. and I. Ye. Gubler. Investigation of the
SHF Properties of Ferrites with Narrow Resonance Curve   533

Polivanov, K. M., V. V. Balakov, and B. P. Pollak.
Propagation of SHF Electromagnetic Waves in Ferrites   550

Polivanov, K. M., Mikhaylovskiy, S. A. Medvedev,
B. P. Pollak, and V. V. Balakov. Magneto-Uniaxial Ferrites
at SHF   567

Krinchik, G. S., and R. V. Chetkin. Gyromagnetic and
Gyroelectric Properties of Ferrites   578

Card 18/18

MIKHHYLOVSKIY, L. K.

PHASE I BOOK EXPLOITATION   SOV/A893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam
ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fizicheskiye i fiziko-khimicheskiye svoystva   Doklady
(Ferrites; Physical and Physicochemical Properties. Reports)
Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted.
4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel
fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the
Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Kondor-
skiy, Professor; E. M. Polivanov, Professor; R. V. Telesnin, Pro-
fessor; G. A. Smolenskiy, Professor; N. N. Smolyarenko and
resor; G. A. Mathematical Sciences; E. M. Smolyarenko; Tech.
Physical and Mathematical Sciences; E. M. Smolyarenko; Tech.
L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech.
Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists,
radio electronics engineers, and technical personnel engaged in
the production and use of ferromagnetic materials. It may also
be used by students in advanced courses in radio electronics.
physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-
Union Conference on Ferrites held in Minsk, Belorussian SSR.
The reports deal with magnetic transformations, electrical and
galvanomagnetic properties of ferrites, studies of the growth
of ferrite single crystals, problems in the chemical and physi-
cochemical analysis of ferrites, studies of ferrites having
rectangular hysteresis loops and multicomponent ferrite systems
exhibiting spontaneous rectangularity, problems in magnetic
attraction, highly coercive ferrites, magnetic spectroscopy,
ferromagnetic resonance, magneto-optics, physical principles of
using ferrite components in electrical circuits, anisotropy of
electrical and magnetic properties, etc. The Committee on Mag-
netism, AS USSR (S. V. Vonsovskiy, Chairman) organized the con-
ference. References accompany individual articles.

Ferrites (Cont.)   SOV/A893

Mikhaylovskiy, L. K.   Cross Modulation in a Ferrite   487

Dubossarskaya, V. Ye., A. A. Manuylova, and S. P. Stanisher-
skaya.   Investigation of Magnesium-Chromium Ferrites in the   791
Decimeter Wave Range

Fabrikov, V. A.   The Theory of Ferrite Dielectric Delay   796
Lines With Distributed Constants

Shvartz, A. A.   Magnetostrictive Cores From Ferric Oxides   807

Shamayev, Yu. M.   Calculation of Transient Processes in
Pulsed Circuits Containing Inductors and Transformers With   817
Ferrite Cores Which Have Rectangular Hysteresis Loops

Belyavskiy, V. P., and Yu. M. Shamayev.   Calculation of Con-
stant Conditions in Pulsed Circuits Containing Ferrites With   823
Rectangular Hysteresis Loops

Card 17/18

Card 6/18

30140
S/194/61/000/007/070/079
D201/D305

9,2571 (1147)

AUTHORS: Mikhaylovskiy, L.K., Balakov, V.F. and Pollak, B.P.

TITLE: Conversion of electromagnetic oscillations of ultra-high frequency in ferrites

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 3, abstract 7 K13 (V sb. Ferrity. Fiz. i fiz.-khim. svoystva, Minsk, AN BSSR, 1960, 560-566)

TEXT: Detection, multiplication and mixing of frequencies have been investigated using ferrites in the 3 cm range. Several models have been constructed of pulsed SHF-power indicators. The dependence has been confirmed of the conversion of a ferrite multiplier on the geometrical dimensions of ferrite and on the level of the applied SHF-power. The shape of the signals obtained after conversion, did not differ practically from that obtained from a crystal-mixer. The conversion gain of a ferrite mixer was found to be much smaller than that of a crystal-mixer. 5 references. /Abstracter's note: Complete translation_/

Card 1/1

9,2571

S/194/61/000/008/067/092
D201/D304

AUTHOR: Mikhaylovskiy, L.K.

TITLE: -   Ferrite cross-modulation

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
               no. 8, 1961, 11, abstract 8 I81 (V sb. Ferrity. Fiz.
               i fiz.-khim. svoystva, Minsk, AN BSSR, 1960, 587-590)

TEXT: A description is given of experiments carried out
in order to establish the basic possibility of obtaining a cross-
modulation of two SHF signals with a poly-crystalline Ni-Zn ferrite.
This possibility has been proven to be theoretically possible.
4 references. /Abstracter's note: Complete translation_7

VB

Card 1/1

20585

9.2571 (also $1147, 1155$)

S/109/61/006/002/017/023
E140/E435

AUTHOR: Mikhaylovskiy, L.K.

TITLE: Broadband Amplifier Using Frequency Converter

PERIODICAL: Radiotekhnika i elektronika, 1961, Vol.6, No.2,
            pp.329-331

TEXT: This note concerns interaction of two microwave signals in
a non-linear element analogous to the Luxembourg-Gorkiy effect in
the ionosphere.   While it appears that the author has in mind
ferrite, no specific non-linear medium is discussed in order to
keep the result "general".   It is shown qualitatively that under
certain conditions amplification of one signal (in power) in the
presence of another can occur with arbitrary relationship between
the frequencies.   Measurements on an unnamed material under
unspecified conditions are claimed to have resulted in a linear
gain factor of 40.   Acknowledgments are expressed to B.P.Pollak,
V.F.Balakov and A.V.Zaytsev for their assistance.   There are
2 Soviet references.

SUBMITTED: July 12, 1960

Card 1/1

24976

S/109/61/006/007/016/020
D262/D306

9.4300 (1482,1158,1160)

AUTHORS: Mikhaylovskiy, L.K., Makarishchev, V.P., Pollak, B.P.,
            and Fabrikov, V.A.

TITLE: Non-linear gyromagnetic effects of a nutational
            character in ferrites

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961,
            1178 - 1183

TEXT: This paper presented at a meeting of All-Union Scientific
and Technical Society of Radio Engineering and Electrical Communi-
cations im. A.S. Popov on May 15, 1960 deals with the non-linear
gyromagnetic properties of ferrites which are responsible for the
amplification of IF and permit the increase of the mixing effi-
ciency of ferrite mixers, result from the nutational oscillations
of magnetization. The nutational oscillations mentioned have been
been predicted from theoretical considerations by V.A. Fabrikov
(Ref. 5: Radiotekhnika i elektronika, 1960, 5, 1, 117) and (Ref. 6:

Card 1/5

Non-linear gyromagnetic ...   24876   S/109/61/006/007/016/020
                                                 D262 D306

Tr. 5-y Vsyesoyuznoy Konferentsii po ferritam, Minsk, 1959). The
present article gives the results of experimental work by the au-
thors, performed with the aim of a) determining the non-linearity
of the dependence of intermediate frequency power I_{IF} on the power
of local oscillator P_H in a SHF mixer, b) determining the presence
in the ferrite sample, placed in the resonant circuit of the IF of
sinusoidal oscillations of magnetization under the influence of
the SHF power of the local oscillator. The source of SHF was a con-
tinuous or pulse modulated klystron generator (Klystron type 43-И
(43-I)). The ferrite sample with the coil was placed in a section
of a standard waveguide at a distance of 6 mm from the narrow wall
of the waveguide. Frequency range was 3 cm, IF was 1 cm, IF was
30 Mc/s. The effective Q of the resonant cct was 20 at 30 Mc/s. The
constant magnetic field was applied parallel to the narrow wall of
the waveguide. Its magnitude was corresponding to that of the fer-
romagnetic resonance. The ferrite sample was a mono crystal of
yttrium ferrite having the ferromagnetic resonance and 5-10 oer-
sted. The shape of the sample was nearly spherical with unlapped
Card 2/5

24876

Non-linear gyromagnetic ...

S/109/61/006/007/016/020
D262/D506

surface. The overall IF amplification was about 10⁵, the noise level of the amplifier, as reduced to that of the pre amplifier input was about 5 microvolt (measured with a (SG-1) [Abstractor's note: Measuring of Signal is mentioned red.). The main difficulties overcome were as follows: Transients in the ferrite ... pod changes of the field component of magnetization for each direction of d.c. field and the influence of ... ping and trailing edges of the ... pulses ... during relaxation the ... and ferromagnetic ... rays have ... the ... the UHF field ... transmission ... phase ... amplifier itself. The ... short duration sub microsecond ... trans. ... applying pulses to the ... directly ... or cut from the ... di ... or cut from the ... -p ... puted by the magnetron ... mental installation is an ... practical-

Card 5

24870

Non-linear gyromagneti ...   S ...
D/02 D/06

tion in the magnetized ferrite layer in the region of the IF
were observed under the influence of a SHF transverse field when
the power of the field ex... a certain critical value of the or-
er of 1-4 watt. I ... observed ... the
sinusoidal and ... relaxation ...
observed by M. T. W... ed in a high quality re-
sonator (Ref. 9: Microwave and low frequency oscillations due to re-
sonance instabilities in ferrites layer. Rev. Letters, 1959, 1, 7,
259). The existence was also determined of a non-linear region on the
characteristics of IF signal ... while the low region for
power P_H in mixing arrangements in which P_H was near the critical
power P_{sz}. These results are in agreement with the theory of non-
linear gyromagnetic effects related to the nutation of ferrite mag-
netization (Refs. 5 and 6: ... The final identification of
these experimentally observed effects will be possible after their
careful quantitative analysis. The above results may be of practi-
cal interest in problems of increasing the efficiency of SHF fer-
rite mixers. The experiment was carried out at the Bauravskiy ener-

Card 4/5

24876

Non-linear gyromagnet...   S/109/61/006/007/010/020
                                            D242 D...

getichesky Institut, Kafedra teoreticheskikh osnov radiotekhniki
(Moscow Power Engineering Institute, Department of Theoretical
Principles of Radio-Engineering). The results of the experiment
were listed... the scheme of K.M. Polivan... Abstractor's note:
No further data given). There are 5 figures in... and 10
Soviet-bloc and 6 non-Soviet-bloc. The references to the English-
language publications read as follows: M. Lewin, Nonlinearity of
a ferrite microwave mixer. Proc. I.R.E., 47, 1058, 1959; C.
Montgomery, R. Silbergleit, J. Wang, Relaxation in small ferrites
ferromagnet... Ann. Phys., New York, 1, 1474, ...; R.C. White,
Microwave applications of linearly-Polarized ... nonlinearities
ties in ferrites. Phys. Rev. Letters, 1, 1958, ...

SUBMITTED: July 1... 19...

Card 5/5

L 10299-66   EWT(d)/EWT(l)/EWA(h)   LJP(c)
ACC NR: AP5026894   SOURCE CODE: UR/0109/65/010/010/1739/1752

AUTHOR: Mikhaylovskiy, L. K.; Pollak, B. P.; Balakov, V. F.;
Khanamirov, A. Ye.

ORG: none

TITLE: Characteristics and uses of single-magnetic-axis ferrites in the
millimeter band (A review)

SOURCE: Radiotekhnika i elektronika, v. 10, no. 10, 1965, 1739-1752

TOPIC TAGS: ferrite, anisotropic ferrite, millimeter wave

ABSTRACT: Based on 1935-65 Soviet and 1948-63 Western published sources
and also on some recent Soviet experimental data (coercitive force, ferromagnetic
resonance, ferrite valve), this review covers the following subjects: Ferro-
magnetic resonance in anisotropic ferrites at moderate external magnetic fields:

Card 1/2   UDC: 621.318.134.029.65.001.8

L 10299-66   12

ACC NR: AP5026894

shf parameters of anisotropic ferrites and methods of measurement; characteristics and variation of composition of $BaO.6Fe_2O_3$ and $SrO.6Fe_2O_3$ ferrites; measured effective anisotropy field of polycrystalline ferrites in the 4- and 8-mm bands; resonant field as a function of the angle between the anisotropy axis and the external bias direction; peculiarities of high- and low-coercitivity anisotropic ferrites; ferroresonance phenomena and their theory; ferrite-loaded waveguide sections (resonant valves); ferrite mixers. "The authors wish to thank S. A. Medvedev and K. M. Polivanov for lending specimens of tested materials and for their attention to the work; and also G. Ye. Bisyayev and O. A. Sokolov for their part in the experimental work." Orig. art. has: 10 figures and 6 formulas.

SUB CODE: 09 / SUBM DATE: 14Aug64 / ORIG REF: 008 / OTH REF: 009

Card 2/2

L 36362-66   EWT(1)   · ⌡

ACC NR: AP6005322   SOURCE CODE: UR/0413/66/000/001/0057/0057
                                                                    38
INVENTOR: Mikhaylovskiy, L. K,   ₽

ORG: none

TITLE: Super high-frequency spectrum analyzer. Class 21, No. 177527

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 57

TOPIC TAGS: spectrum analyzer, pulse amplifier, super high frequency

ABSTRACT: An Author Certificate has been issued for a super high-frequency spectrum
analyzer containing a converter, a heterodyne, a wide-band low-frequency amplifier,
and an oscillograph. To observe the spectrum and to make panoramic measurements
of the pulse parameters with super high-frequency charges and all durations, a
converter in the form of a ferrite cross modulator is inserted at the analyzer in-
put. The ferrite cross modulator is ball-shaped with two windings on it along the
axis of the rectangular waveguide in the constant magnetic field (see Fig. 1).
Orig. art. has: 1 figure. [Translation of abstract]   [NT]

Card   1/2   UDC: 621.317.757
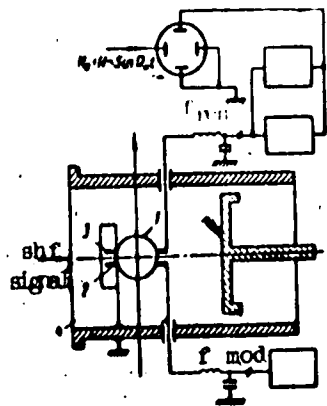
L 36362-66

ACC NR: AP6005322

Fig. 1. Super high-frequency spectrum analyzer

1 - Small ferrite ball; 2 and 3 - coils; 4 - waveguide.

SUB CODE: 09/ SUBM DATE: 28Dec63

Card 2/2

ACC NR: AT6028993   SOURCE CODE: UR/0000/66/000/000/0310/0315

AUTHORS: Mikhaylovskiy, L. K.; Balakov, V. P.; Puchkov, V. S.; Radchenko, V. F.

ORG: none

TITLE: Mixing of electromagnetic signals on a magnetically monoaxial ferrite

SOURCE: Vsesoyuznoye soveshchaniye po ferritam. 4th, Minsk. Fizicheskiye i fiziko-khimicheskiye svoystva ferritov (Physical and physicochemical properties of ferrites); doklady soveshchaniya. Minsk, Nauka i tekhnika, 1966, 310-315

TOPIC TAGS: ferrite, magnetic property, magnetic material, electromagnetic mixing

ABSTRACT: The possibility of constructing ferrite mixers for use in the 4-cm wave-length range was investigated. This work supplements the results of K. M. Polivanov, L. K. Mikhaylovskiy, S. A. Medvedev, B. P. Pollak, and V. P. Balakov (Sb. Ferrity, Izd. AN BSSR, Minsk, 567, 1960). The experiments were carried out on magnetically mono-axial ferrite specimens. The experimental procedure was identical to the one described by L. K. Mikhaylovskiy, V. P. Makariahchev, B. P. Pollak, and V. A. Fabrikov (Radiotekhnika i elektronika, No. 7, 1178, 1961). It was found that the intensity of the intermediate signal P_{int} was given by $P_{int} = AP_s P_g$, where A is a constant characteristic of the particular ferrite, P_s — the intensity of the ultrahigh frequency signal, and P_g — the intensity of the heterodyne signal respectively.

Card   1/2

ACC NR: AT6028993

The authors conclude that it is possible, in principle, to mix two electromagnetic signals in the millimeter wavelength region by means of magnetically monoaxial ferrites at relatively small external magnetising fields. Orig. art. has: 5 equations.

SUB CODE: 09, 11/ SUBM DATE: 22Dec65/ ORIG REF: 003

Card 2/2

MIKHAYLOVSKIY, M.

MIKHAYLOVSKIY, M.; SHLEPINA, M., redaktor; RAKOVA, I., tekhnicheskiy
redaktor.

[Durable and attractive footwear in greater quantity] Bol'she
prochnoi i krasivoi obuvi. Moskva, Izd-vo VTsSPS Profizdat, 1953.
30 p.   (MLRA 7:8)
     (Shoe industry)

MIKHAYLOVSKIY, M. (Moskva)

    The "Neftegaz" plant has the lead. Pozh.delo 8 no.11:2-3
    N '62.   (MIRA 15:11)
      (Moscow--Petroleum industry--Fires and fire prevention)

L h7?/a.?/   EM. a)/EMT(1)/EMP(v)/?- ..?(k)/EMP(n), ...\..   eN

ACC NR: AP602907   SOURCE CODE: UR/0413/66/000/014/0128/0129

INVENTOR: Gerlovin, L. I.; Chernovin, N. A.; Averin, V. A.; Nagibin, A. Ya;
Torgashov, A. L; Aleksandrovskiy, A. A.; Sigachev, V. P.; Mikhaylovskiy, M. M.;
Mironov, M. I.

ORG: none

TITLE: Valve with a hydraulic or pneumatic piston drive. Class 47, No. 184084
[announced by the Special Design Office of the Baltic Boiler Building Factory im.
Sergo Ordzhonikidze (Spetsial'noye konstruktorskoye byuro kotlostroyeniya Baltiyskogo
zavoda)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 128-129

TOPIC TAGS: valve, hydraulic piston drive, pneumatic piston drive, hydraulic device,
pneumatic device, piston engine u\
ABSTRACT: The proposed valve with a hydraulic or pneumatic piston drive is designed
for opening and closing the through flow-section of main and auxiliary pipings. In
order to synchronize the opening and closing of both pipings, its control piston is
provided with an annular groove, which, in the open valve position, connects the

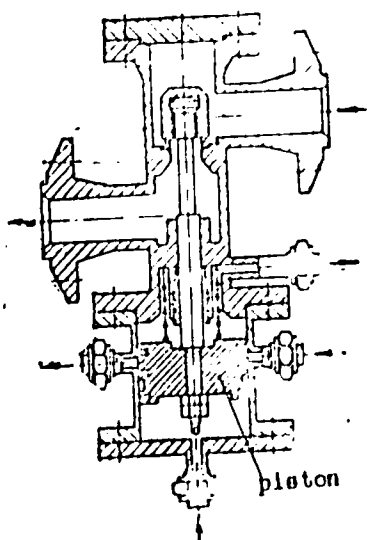Card 1/2   UDC: 621.646.23-82-85

L 47374-66

Fig. 1. Piston valve

piston

intake and outlet cavities of the auxiliary piping (see Fig. 1). Orig. art. has:
1 figure.

[AV]

SUB CODE: 21/ SUBM DATE: 11May65/

Card 2/2   mjs

MIKHAYLOVSKIY, M.S.

Distinct pulsating sound in the ear associated with aneurysm.
Vest. otorinolar., Moskva 14 no. 5:72-73 Sept-Oct 1952. (CLML 23:3)

1. Of the Clinic for Diseases of the Ear, Throat, and Nose (Head
-- Prof. V. A. Chudnosovetov), Dagestan Medical Institute.

USSR/Medicine - Novocain Block   Jul/Aug 53

"The Application of an Intradermal Novocain Block in Anginas," M. S. Mikhaylovskiy, Clinic of Ear, Throat and Nose Diseases, Dagestan Med Inst

Vest Otorinolar, No 4, pp 56-58

Advocates the application of a novocain block in cases of angina [septic throat], acute tonsillitis, peritonsillitis etc. Injections of a 0.5% solution of novocain were made into the skin folds of the horizontal part of the lower jaw. No other treatment

was given. Attributes the beneficial results of this treatment to the neurotrophic effect of the blockade acting on the central nervous system.

270T62

270T62

MIKHAYLOVSKIY, M. S.

Mikhaylovskiy, M. S.

"The lymphatic system of the reticular labyrinth and it connection with
the orbit and front surface of the face of children (experimental-
clinical investigation)." Stalingrad State Medical Inst. Makhachkala,
1945 (Dissertation for the degree of Doctor in Medical Science)

Knizhnaya letopis
No. 15, 1956. Moscow

MIKHAYLOVSKIY, M.S.

Modification of the incision in radical surgery of the ear. Vest. oto-rin 17 no.3:50-51 My-Je '55.   (MLRA 8:9)

1. Iz oto-laringologicheskogo otdeleniya Respublikanskoy klini-cheskoy bol'nitsy, Makhachkala.
        (EAR, surgery
            out modification)

MIKHAYLOVSKIY, M.S.

Cure in a case of otogenous abscess of the cerebellum.Vop.
nairokhir.19 no.4:57-58 Jl-Ag '55.   (MLRA 8:10)

1. Iz respublikanskoy klinicheskoy bol'nitsy Dagestana
       (OTITIS MEDIA, complications,
           abscess of cerebellum, cure)
       (CEREBELLUM, abscess,
           otogenous, cure)
       (ABSCESS,
           cerebellum, otogenous, cure)

USSR/Human and Animal Morphology (Normal and Pathological) Lymph   S-4
            System

Abs Jour : Ref Zhur- Biol., No 12, 1958, No 55123

Author   : Mikhaylovskiy M.S.
Inst   : Daghestan Institute of Medicine
Title   : On the Problem of Contact Between Lymphatic Pathways of the
           Ethmoidal Labyrinth and the Orbital Cavity.

Orig Pub : Sb. nauchn. tr. Dagest. med. in-t, 1956, 6, 262-270

Abstract : The contact of the nasal lymphatic vessel and the orbital
           cavity was studied in 47 child corpses by injecting stained
           substances into the mucosa of the ethmoidal labyrinth. The
           author thinks that the basic anastomosis between the lym-
           phatic vessels of the ethmoidal labyrinth and the orbital
           cavity consists of 1 or 2 trunks which are located near the
           medial canthus. Proceeding toward the orbital cavity, these
           vessels skirt the lacrimal sac from above and at its medial
           portion.

Card   : 1/1

MIKHAYLOVSKIY, M.S.   (Makhachkala.

Content of glycogen in tissues of the esophagus in the
chemical trauma. Arkh. pat. no.9:40-45 '63.

1. Kafedra patolog...
Dagestanskogo med... ...tuta. Submitted November...
1963.

MIKHAYLOVSKIY, N.G.

Methods for the pasting-on and sealing of strain gauges. Izm.tekh.
no.12:31 D '61.
(Strain gauges)

(MIRA 15:1)