

ACCESSION NR: AP4043403

Gor'kogo (Khar'kov State University)

SUBMITTED: 13Dec63

ENCL: 01

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 003

Card # 3/4

L 00679-66 EFF(c)/EWT(m)/EWP(b)/EWP(t) IJP(c) JD

ACCESSION NR: AP5012574

UR/0181/65/007/005/1559/1552

AUTHOR: Miloslavskiy, V. K.; Lyashenko, S. P.TITLE: Concentration shift of the edge of the intrinsic absorption band in tin dioxide ³¹₃₈ 27

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1550-1552

TOPIC TAGS: tin compound, absorption edge, refractive index, light transmission

ABSTRACT: The authors observed and investigated the shift of the intrinsic absorption edge of SnO_2 , the red boundary of which is located at 4 eV. The measurements were made on polycrystalline layers deposited on a quartz substrate. The electron density was varied by introducing antimony atoms. The refractive index ($n = 1.93$) was determined from interferometric transmission curves in the visible region. The width of the forbidden band was 3.97 eV, in fair agreement with data on temperature measurements of the conductivity. The experimental points fit well the theoretical formula for the connection between the shift and the electron density. The value of the reduced effective mass, $\mu = (0.48 \pm 0.02)m$, necessary to reconcile these data with the theory, is close to the value of μ obtained from the spectral variation of the absorption of the sample with the lowest electron density. On the other hand, the value of μ obtained in the present work differs noticeably from

Card 1/2

L 00679-66

ACCESSION NR: AP5012574

the ohmic reffective mass obtained from the spectral variation of the real part of the dielectric constant in an earlier investigation by the authors (FIT v. 6, 2560, 1964). The difference is attributed to anisotropy of the dispersion in the conduction band. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: 05Nov64

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 004

Card 2/2

L 1800-66

ACCESSION NR: AP5017437

UR/0248/65/000/007/0072/0079
612.017.014.6:615.771.1

AUTHOR: Lyashenko, V. A.

TITLE: Effect of cytostatic substances on the immunologic reactivity of the organism

SOURCE: AMN SSSR. Vestnik, no. 7, 1965, 72-79

TOPIC TAGS: cancer drug, alkylation, immunology, nucleic acid, antibody, drug effect

ABSTRACT: This is a literature survey on the effect of inhibitors of immunogenesis which affect antibody synthesis, that is, alkylating agents and antimetabolites used as anticancer substances. It is concluded that they represent 2 types of activity: the alkylating agents enter into reactions with nucleic acids while the antimetabolites disturb nucleic acid synthesis. The alkylating agents injected repeatedly prior to introduction of antigens inhibit proliferation of lymphoid tissue. The antimetabolites, introduced after the antigen, have a selective depressant effect on immunocompetent cells and are thus of particular interest in further immunologic studies. Orig. art. has: None

Card 1/2

L 1800-66

ACCESSION NR: AP5017437

ASSOCIATION: Moskovskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok
im I. I. Mechnikova Ministerstva zdravookhraneniya SSSR (Moscow Scientific
Research Institute of Vaccines and Sera of the Ministry of Health, SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NR REF SOV: 015

OTHER: 104

mlb
Card 2/2

L 4448-66 EWT(1)/EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b) IJP(c) JD/GG

ACCESSION NR: AP5017899

UR/0051/65/019/001/0108/0114
535.32 + 535.341

AUTHORS: Lyashenko, S. P.; Miloslavskiy, V. K.

TITLE: Study of the optical properties of tin dioxide thin films in the visible and ultraviolet regions

SOURCE: Optika i spektroskopiya, v. 19, no. 1, 1965, 108-114

TOPIC TAGS: tin compound, optic measurement, optic property, optic spectrum, UV spectrum, absorption edge

ABSTRACT: In view of the appreciable divergence of the results obtained by different authors, apparently owing to the use of different criteria for estimating the edge of the fundamental band, the authors investigated the optical constants of thin SnO₂ films with different carrier densities in the range from 1.1 to 0.23 μ. A thin layer of SnO₂ was deposited on a quartz plate heated to temperature ≥ 500C by a method described by the authors earlier (Opt. i spektr. 8, 868,

Card 1/3

L 4448-66

ACCESSION NR: AP5017899

1960). The transmission and reflection of the samples was measured with a spectrophotometer (SF-4). The optical constants and the thickness of the layer were measured from the interference transmission curves, as described by the authors earlier (Opt. i spektr. v. 16, 80, 1964). A special attachment for the spectrophotometer was used to measure the reflection coefficient at wavelengths shorter than 0.35μ . The results show that for energies greater than 4 eV the absorption is due to the direct allowed interband transitions, and that for lower energies it depends on the lattice imperfections. The frequency dependence of the absorption of strongly doped samples was explained on the basis of the theory of distorted bands. The temperature dependence of the absorption edge was also investigated and it was found that the absorption edge increases linearly with decreasing temperature, at an average rate of 6.5×10^{-4} eV/deg. The actual value of the absorption edge depends on the carrier density, ranging from approximately 3.8 to 4.4 eV at room temperature. The authors thank I. N. Shklyarevskiy and R. G. Yarova for valuable discussions. Orig. art. has: 6 figures and 5 formulas.

6

44 55

55

Card 2/3

L 4448-66

ACCESSION NR: AP5017899

8

ASSOCIATION: None

SUBMITTED: 30Apr64

ENCL: 00

SUB CODE: OP

NR REF SOV: 006

OTHER: 009

GC
Card 3/3

SOV/147-59-2-7/20

AUTHORS: Galkin, S.I., Kabanov, V.V. and Lyashenko, S.S. (Novosibirsk)

TITLE: Experimental Investigation of Bending of a Cantilever (Circular) Cylindrical Shell with a Large Rectangular Cut-Out when Loaded by a Concentrated Force at the Free End (Eksperimental'noye issledovaniye karkasirovannoy krugovoy tsilindricheskoy obolochki s bol'shim pryamougol'nym vyrezom pri izgibe sosredotochennoy siloy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1959, Nr 2, pp 49-61 (USSR)

ABSTRACT: The experiments were carried out on a shell of 600 mm diameter, 3800 mm long, plated with D16AT of 0.8 mm thickness. The shell was stiffened on the outside by longitudinal stringers (pressed dural angles, Pr 100-3, of a cross-sectional area of 0.434 cm^2) and on the inside by ribs spaced at 130 mm. The total length of the cut-out was 1000 mm. The general lay-out of the shell is shown in Fig 1, while Fig 2 shows the cross-section of the rib. Along their whole length the longitudinal edges of the cut-out were reinforced by either channels with flat fillets or

Card 1/5

SOV/147-59-2-7/20

Experimental Investigation of Bending of a Cantilever (Circular) Cylindrical Shell with a Large Rectangular Cut-Out when Loaded by a Concentrated Force at the Free End

simply by flats, as shown in Fig 3. In the plane of symmetry of the shell (i.e. with respect to cut-out) two longitudinal joints were made. One end of the shell was firmly fixed (by means of a fitting attached to a steel plate) and the shell was loaded at the other (free) end, the force being applied with the aid of cables to a short steel cylinder which was fitted into the shell (see Fig 1). The force was measured by a spring dynamometer. Two different directions of loading were used, as shown in Fig 4. In the first case the force vector was in the plane of symmetry of the structure and in the second case, in the axial plane perpendicular to the plane of symmetry. Fig 5 shows the complete rig ready for experiments. The results of experiments are presented in Figures 7 to 14. The graphs also include the theoretical curves obtained from relations developed in Ref 1. All experimental data and the computational values refer to the same loading, viz 1000 kg. Figures 7 to 10

Card 2/5

SOV/147-59-2-7/20

Experimental Investigation of Bending of . Cantilever (Circular) Cylindrical Shell with a Large Rectangular Cut-Out when Loaded by a Concentrated Force at the Free End

refer to the symmetric loading (case 1) and Figures 11 to 14 refer to the asymmetric loading (case 2) as follows: Fig 7 shows the tangential stresses in the open portion of the shell (at sections 1 and 4, see Fig 1). It is seen that they do not remain constant and are greatest between the 8th and 9th stringers. It also appears that the strength of the longitudinal reinforcement on the edges of the cut-out has essentially only a local effect on the magnitude of stresses in the panel at the boundary of the cut-out. There is good agreement between the calculated and the experimental results. From Fig 8, which refers to sections 5 and 7, it is seen that in the closed portion of the shell the distribution of tangential stresses is extremely non-uniform, showing even local concentration of stresses. The peaks in the stress curves become less sharp further away from the cut-out.

Card 3/5

SOV/147-59-2-7/20

Experimental Investigation of Bending of a Cantilever (Circular)
Cylindrical Shell with a Large Rectangular Cut-Out when Loaded by
a Concentrated Force at the Free End

The strength of the reinforcement on the edges of the cut-out has an insignificant influence on the distribution of the tangential stresses. Fig 9 shows the normal stresses at sections 1, 4 and 5, while in Fig 10 the normal stress along the stringers Nr 1 and Nr 9 are shown, the last one being the reinforcement of the cut-out edge. Again there is good agreement between the experiment and the theory of Ref 1. For the case of the asymmetric loading the conclusions may be summarised as follows: The distribution of tangential stresses in the open part of the shell (Fig 11 refers to sections 1 and 4) again is not constant. The strength of the reinforcement on the cut-out edge again has only a local effect, influencing the stresses in the panel between the 8th and 9th stringers. Agreement between the experiment and the theory of Ref 1 is much poorer than in the previous case. In the closed part of the shell the distribution of tangential stresses is also non-uniform (Fig 12, sections 5 and 7).

Card 4/5

SOV/147-59-2-7/20

Experimental Investigation of Bending of a Cantilever (Circular)
Cylindrical Shell with a Large Rectangular Cut-Out when Loaded by
a Concentrated Force at the Free End

The non-uniformity becomes less intense further away from the cut-out into the closed part of the shell. The strength of the reinforcement has fundamentally a local effect influencing only the maximum stress arising in the panel between the 9th and 10th stringers. Agreement between the calculated normal stresses and the experimental values (Fig 13) is good at Section 1 (at the middle of the cut-out) but poor at the boundary of the cut-out (section 4). Fig 14 represents the distribution of normal stresses in the stringers Nr 9 and Nr 5. There are 14 figures and 1 Soviet reference.

SUBMITTED: October 21, 1958

Card 5/5

1ST AND 2ND COLUMNS

1ST AND 4TH COLUMNS

PROCESSING AND PROPERTIES INDEX

CA

An apparatus for determining essential oils. S. P. Lyubshin. *Porositiv* 1939, No. 10, 15-17; *Khim. Recl. Zhur.* 1940, No. 4, 13. The plant material (in a glass bag) and the receptacle are placed in a 1.5-l. flask equipped with a reflux condenser connected to a steam generator. From the condenser the essential oil is passed directly into a graduated receptacle of special design. W. R. Heun

COMMON ELEMENTS

COMMON VARIABLES INDEX

6-27-52-12000

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM DONORS

12000 11000 10000 9000 8000 7000 6000 5000 4000 3000 2000 1000

RELATIONS

12 11 10 9 8 7 6 5 4 3 2 1

17

Botanical and pharmacognostic characteristics of cranberry tree bark from Russia. S. S. Lyashenko. *Farmatsiya* 1940, No. 4, 28-32. — Structurally the bark of *Viburnum opulus* (cranberry tree) is almost identical with that of *V. prunifolium* (black haw). The parenchyma contains crystals of $CaCO_3$. Bark from native (Russian) *V. opulus* is compared with the specifications of Russian Pharmacopoeia VII.

Julian P. Smith

COMMON ELEMENTS

COMMON VALUABLE METALS

ASAC-35A 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
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

LYASHENKO, S.-S., Docent

Pharmacy - Odessa

Odessa Section of the All-Union Scientific Pharmaceutical Society. Apt. delo no. 4,
1952.

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

1. LYASHENKO, S. S., Docent
2. USSR (600)
4. Chenopodium
7. Pharmacognosy of Chenopodium, Apt. delo, No. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

LYASHENKO, S.S.

USSR/Pharmacology. Pharmacognosy. Toxicology -
Medicinal Plants.

T-5

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71739

Author : Lyashenko, S.S.

Inst :

Title : On the Pharmacognosy of the Seeds of Some Species of
Plantago Major.

Orig Pub : Nekotoryye voprosy farmatsii, Kiev, gosmedisdat USSR,
1956, 216-219

Abstract : No abstract.

Card 1/1

- 62 -

TROTSSENKO, A.G., *otv.red.*; PORTNOV, A.I., *prof., red.*; GORBOV, T.P., *red.*;
YEVDOKIMOV, D.Ya., *red.*; KNIZHKO, P.O., *red.*; KORCHINSKIY, N.O.,
red.; LESHCHINSKIY, A.F., *red.*; LYASHENKO, S.S., *red.*; ROZENBERG,
M.A., *prof., red.*; SAVITSKIY, I.V., *prof., red.*; SHELUD'KO, V.M.,
red.

[Research in the field of pharmacy] Issledovanie v oblasti farmatsii. Pod obshchei red. A.I.Portnova. Odessa, M-vo zhdavookhraneniia USSR, 1959. 314 p. (MIRA 13:6)

1. Zaporozhskiy gosudarstvennyy farmatsevticheskiy institut. 2. Kafedra organicheskoy khimii Odesskogo gosudarstvennogo farmatsevticheskogo instituta (for Trotsenko). 3. Kafedra farmatsevticheskoy khimii Odesskogo gosudarstvennogo farmatsevticheskogo instituta (for Portnov). 4. Kafedra neorganicheskoy i sudebnoy khimii Odesskogo gos.farmatsevt. instituta (for Yevdokimov). 5. Kafedra analiticheskoy khimii Odesskogo gos.farmatsevt.instituta (for Knizhko). Kafedra markaizma-leninizma i organizatsiya farmdela Odesskogo gos.farmatsevt.instituta (for Korchinskiy). 6. Kafedra biokhimii Odesskogo gos.farmatsevt.instituta (for Leshchinskiy). 7. Kafedra farmakognozii i tekhnologii lekarstvennykh form i galenovykh preparatov Odesskogo gos.farmatsevt.instituta (for Lyashenko). 8. Zaveduyushchiy kafedroy fiziologii i farmakologii Odesskogo gos.farmatsevt.instituta (for Rozenberg). 9. Zaveduyushchiy kafedroy biokhimii Odesskogo gos.farmatsevt.instituta (for Savitskiy). 10. Kafedra farmakognozii i botaniki Odesskogo gosudarstvennogo farmatsevticheskogo instituta (for Shelud'ko).

(PHARMACY)

LYASHENKO, S.S.

Pharmacognosy of some hawthorn species. Report No.1. Trudy
Len. khim.-farm. inst. 12:41.54 '61. (MIRA 15:3)

1. Kafedra tekhnologii lekarstvennykh i galenovykh preparatov
Zaporozhskogo farmatsevticheskogo instituta.

(HAWTHORN)
(PHARMACOGNOSY)
(BOTANY.-ANATOMY)

LYASHENKO, S.S., dotsent

Review of H.P. Pivnenko's book "Pharmaceutical technology
of drugs." Farmatsev. zhur. 18 no.5:93 '63. (MIRA 17:8)

SOV/137-59-1-1662

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 220 (USSR)

AUTHOR: Lyashenko, S. V.

TITLE: Die Design in Trimming Presses Employing Shock Absorbers
Consisting of Disc Springs (Shtampy obreznykh pressov s amortiza-
torami iz tarel'chatykh pruzhin)

PERIODICAL: V sb.: Materialy Konferentsii po usoversh. tekhnol. obrabotki
metallov davleniyem. Minsk, Belorussk. un-t, 1958, pp 27-37

ABSTRACT: The author examines the design of dies employed in the following
operations: Simultaneous trimming of fins and straightening of
forgings (F); simultaneous straightening and bending of F's; consec-
utive trimming and straightening of F's; forming of the circumfer-
ence and lateral surfaces of F's for flywheel rims; simultaneous
trimming of fins, punching of webs, and straightening of F's. In all
of the designs mentioned, disc springs serve as shock absorbers to
protect the presses from overloading and also function as ejectors.
M. Ts.

Card 1/1

LYASHENKO, S.V.

Raise the quality of the Belarus' tractor. Trakt. i sel'khozmasb.
no.3:43 Mr '58. (MIRA 11:5)

1. Zamestitel' glavnogo metallurga Minskogo traktornogo zavoda.
(Tractors)

LYASHENKO, S. V.

PA 37/49T76

USSR/Engineering
Furnaces
Fuel - Conservation

Sep 48

"Thermal Furnaces Without Bottom Plates but With
Recirculation of Gases," S. V. Lyashenko, Engr,
2 pp

"Vest Mashinostroy" Vol XXVIII, No 9

Describes arrangement in detail, with two sketches.

37/49T76

1. LYASHENKO, S. V.
2. USSR (600)
4. Briquets
7. Making briquets from metal waste. Lit. proiz. no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

✓ Unfired kaolinite brick. O. M. Margulis, E. A. Gir'yar,
and S. V. Lyashenko. *Metallurg* 1956, No. 10, 23-8.
Unfired kaolinite brick contg. 85% coarse fireclay grog and
15% kaolinite had the following properties: max. service
temp. 1750°; temp. of initial deformation under 2-kg.
load 1420-40°; shrinkage at 1300° 0.01%, at 1450° 0.1-
0.8%; compressive strength 150 kg./sq. cm.; and porosity 12-
14%.
V. N. Bednarski

3

LYASHENKO, S.V. inzh.

Trimming-press dies with disc-spring shock absorbers. Mash.Bel.
no.5:66-76 '58. (MIRA 12:11)
(Punching machinery)

LYASHENKO, S.V., inzh.

Gas cementation of tractor parts with use of mandrels.
Metalloved. 1 term. obr. met. no. 5:57-60 My '60. (MIRA 13:12)

1. Minskiy traktorny zavod.
(Cementation (Metallurgy))

LYASHENKO, Semen Vlasovich, inzh.; STEL'MAKOV, S.M., inzh., red.;
SHILLING, V.A., izd.red.; GVIRTS, V.L., tekhn.red.

[Use of dies with dished-spring shock absorbers for trimming presses; Minsk Tractor Plant practices] Primenenie shtampov s amortizatoremi iz tarel'chatykh pruzhin dlia obreznykh pressov; opyt Minskogo traktornogo zavoda. Leningrad, 1960. 11 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seria: Kovka i goriachaia shtampovka, no.5).

(MIRA 14:6)

(Forging machinery) (Minsk—Tractor industry)

PHASE I BOOK EXPLOITATION

SOV/5736

Lyashenko, Semen Vlasovich, Engineer.

Primeneniye shtampov s amortizatorami iz tarel'chatykh pruzhin dlya obreznykh pressov; opyt Minskogo traktornogo zavoda (Application of Trimming-Press Dies Having Belleville-Spring Shock Absorbers; Experience of the Minsk Tractor Plant) Leningrad [Leningradskiy Dom nauchno-tekhnicheskoy propagandy (LDNTP)] 1960. 15 p. (Series: Obmen peredovym opytom. Seriya: Kovka i goryachaya shtampovka, vyp. 5)

Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR. Leningradskiy Dom nauchno-tekhnicheskoy propagandy. Leningradskoye Pravleniye NTO Mashprom. Sektsiya obrabotki metallov davleniyem.

Ed.: S. M. Stel'makov, Engineer; Ed. of Publishing House: V. A. Shilling; Tech. Ed.: V. L. Gvirts.

PURPOSE: This booklet is intended for technical personnel in forging

Card 1/3

Application of Trimming-Press (Cont.)

SOV/5736

shops and die-design institutes.

COVERAGE: Various types of belleville-spring shock absorbers used in trimming presses are described. Flash cutoff and straightening combined with bending or piercing is explained through a description of several compound dies. An equation for calculating the forces necessary for straightening is given. No personalities are mentioned. There are 3 references, all Soviet.

TABLE OF CONTENTS: [compiled from text headings]

Types of Shock Absorbers	2
Flash Trimming Combined With Straightening of a Forging	4
Simultaneous Straightening and Bending of Forgings	6
Progressive Trimming and Straightening of a Camshaft Forging	7
Sizing a Flywheel-Rim Forging in Radial and Axial Directions	8
Card 2/3	

LYASHENKO, S.V.

Piercing cylindrical openings in forging with hubs. Kuz. shtam.
precizv. 3 no.3:41-42 Mr '61. (MIRA 14:6)
(Forging)

32965

S/146/61/004/006/004/020
D249/D301

// 9100

AUTHORS: Barutkin, I. N., Lyashenko, T. I. and Udovenko, V. F.

TITLE: An instrument for determining the iron content in engine oil

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 6, 1961, 26-30

TEXT: An instrument $\ast M-1$ (ZhM-1) has been developed for measuring small concentrations of iron particles in internal-combustion engine lubricants. Its operation is based on measurement of the magnetic permeability of oil. The minimum concentration of iron which can be measured is 0.001%. The instrument consists of a supply unit and an induction unit, the former comprising two solenoids K_1 , K_2 , a voltmeter and a rheostat, the latter two inductance coils K_3 , K_4 and an indicator. With a perfectly symmetrical arrangement of the coils no current flows through the galvanometer. However, if oil containing iron particles is introduced into

Card 1/3

32965

S/146/61/004/006/004/020
D249/301

An instrument for determining ...

K_1 and "pure" oil into K_2 the galvanometer current is $I_o = \omega \Delta M I_m / Z$,
 where ΔM - increment of mutual inductance of the coils K_1 and K_3
 due to the presence of iron. I_m - peak value of primary current;
 Z - total impedance of the secondary circuit. The author deduces
 for the iron content $m_{ir} = C_{ind} \alpha$, where α is the deflection of the
 galvanometer and C_{in} the constant of the instrument $C_{in} = 1/S_g S_c$,
 S_g being the sensitivity of the galvanometer and S_c that of the
 circuit; $S_c = I_m \omega \mu_{ir}^* n_1 n_3 / z \rho$; μ_{ir}^* - iron permeability; $\mu_1 \mu_3$ -
 number of turns per unit length of coils K_1 and K_3 ; ρ - iron den-
 sity. For the actual instrument the constant C_{in} is 1 mg/mm or
 0.001% iron/mm deflection. Since it is impossible to obtain in
 practice a perfectly symmetrical arrangement of coils, a compen-
 sating unit must be used. This consists of a) a movable steel need-
 le, whose depth of penetration in one pair of coils is controlled

Card 2/3

32965

S/146/61/004/006/004/020
D249/D301

An instrument for determining ...

by means of a micrometer screw and, b) two variable resistors r_1 and r_2 . The main source of error with the instrument described is the variation of the size of iron particles. Other errors are due to voltage and frequency fluctuations, non-sinusoidal form of the current, and interference. The effect of these errors can be minimized by using strong magnetic fields, e.g. of the order of 10^4 A/m. This article was recommended by the Kafedra Fiziki (Department of Physics). There are 3 figures, 1 table and 1 Soviet-bloc reference.

ASSOCIATION: Khar'kovskiy avtomobil'no-dorozhnyy institut (Khar'kov Automobile-Highway Institute)

SUBMITTED: April 19, 1961

Card 3/3

X

I 17810-65 EEO-2/EWT(1)/EEC-4/EEC(b)-2/EED-2/EWA(h) Pn-4/Peb/PL-4 IJP(c)/ESD(dp)
ACCESSION NR: 4045500 S/0109/ 64/009/009/1714/1716

AUTHOR: De yugin, I. A.; T. N. Lyashenko

TITLE: Noise in nonreciprocal systems in the superhigh-frequency range B

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, 1714-1716

TOPIC TAGS: ferrite isolator, ferrite resonance isolator, waveguide circulator, ferrite

ABSTRACT: The results of a study of noise characteristics of ferrite isolators of both the resonance and field-shift type are discussed. Samples in the form of plates (polycrystals) and spheres (polycrystals and single crystals) were investigated. As the results were basically the same at the various test frequencies (3000, 9100, 12 and 35,000 Mc), the major test effort was limited to 9100 Mc, using the lower mode of the H10 wave. It was established that the noise in the isolator systems is of a non-reciprocal character, which may be defined as the difference in acoustic power between the forward and the reverse directions of propagation, or as the difference, for only one propagation direction, at various directions of the external magnetizing field. The re-
Card 1/3

L 17810-65

ACCESSION NR: 4045500

sults obtained are as follows: the ferrite noise component, depending on the magnetic field, represents a spontaneous radiation which apparently is due to spin transitions between split level components; this determines the nonreciprocal noise effect. This ferrite radiation is circularly polarized in a plane perpendicular to the magnetic field i.e., parallel to the wide wall of the waveguide. The form and direction of the polarization of the power radiated and absorbed by a ferrite sample are the same, so that the maximum noise radiation occurs in the isolated direction. In the case of isolators with displaced fields, the noise drops with a field increase. The essential difference between the displaced field and resonance isolators is that, in the latter, the field at which maximum nonreciprocity was observed did not depend on the position of the ferrite sample, while in the field-displacement isolators a change in position did alter the field value for maximum nonreciprocity. The value of the nonreciprocal effect also depends on ferrite-sample temperature; specifically, a rise in the field intensity at which a maximum of nonreciprocal effect takes place is observed with the temperature rise in ferrite. Orig. art. has.: 4 figures

Card 2/3

L 17810-65
ACCESSION NR: 4045500

ASSOCIATION: none

SUBMITTED: 09Dec63

SUB CODE: EC

ENCL: 00

REF SOV: 004

OTHER: 000

Card 3/3

MILAYEV, S.M.; LYASHENKO, T.V.

Colorimetric determination of arsenic in high-purity
metallic bismuth. Sbor.trud. VNIITSVETMET no.9:34-36
'65.

Determination of lead in metallic bismuth. Ibid.:78-81
(MIRA 18:11)

LYASHENKO, V. A., Cand of Med Sci -- (diss) "Functional Status of the
Neural Muscular System of the Body During Scoliosis," Khar'kov, 1959,
15 pp (Khar'kov Medical Institute) (KL, 6-60, 126)

LYASHENKO, V.A.; KRASHNOROSHINA, L.I.

Changes in wound microbial flora during penicillin therapy.
Antibiotiki 4 no.3:78-80 My-Je '59. (MIRA 12:9)

1. Kafedra mikrobiologii (zav. - prof.M.N.Lebedeva) I Moskov-
skogo ordena Lenina meditsinskogo instituta.

(PENICILLIN, eff.

on exper. micrococcal wound infect. (Rus))

(MICROCOCCAL INFECTION, exper.

eff. of penicillin on micrococcal wound
infect. (Rus))

LYASHENKO, V.A.

Antitoxic effect of levomycetin under experimental conditions.
Antibiotiki 5 no.1:112-115 Ja-F '60. (MIRA 13:7)

1. Laboratoriya eksperimental'nogo izucheniya lechebnykh svoystv
novykh antibiotikov (zav. - prof. V.A. Shorin) Instituta po izyskaniyu
novykh antibiotikov AMN SSSR.

(CHLOROMYCETIN) (SHIGELLA)
(TOXINS AND ANTITOXINS)

LYASHENKO, V.A.

Effect of cortisone on the therapeutic effects of levomycetin in acute experimental infections. Antibiotiki 5 no.3:41-44 My-Je '60. (MIRA 14:6)

1. Laboratoriya eksperimental'nogo izucheniya lechebnykh svoystv novykh antibiotikov Instituta po izyskaniyu novykh antibiotikov AMN SSSR.

(CORTISONE) (CHLOROMYCETIN)
(STAPHYLOCOCCAL INFECTIONS) (SHIGELLA)

LYASHENKO, V. A.

Cand Med Sci - (diss) "Effect of cortisone and levomycetin on the course of experimental dysentery and staphylococci infection." Moscow, 1961. 15 pp; (Academy of Medical Sciences USSR); 250 copies; price not given; (KL, 5-61 sup, 204)

- LYASHENKO, V.A., doktro khimicheskikh nauk, prof.; BYKOV, V.N., kand.tekh.nauk;
RUDENKO, V.A., inzh.

Sigma phase in 1Kh20N14C2 steel. Metalloved. i term. obr. met. no.2:22-24
F '61. (MIRA 14:3)

(Chromium-nickel steel--Metallography)
(Phase rule and equilibrium)

LYASHENKO, V.A.

Effect of levomycetin on the carbohydrate metabolism in endotoxin poisoning. Antibiotiki 6 no.2:135-138 F '61. (MIRA 14:5)

1. Laboratoriya eksperimental'nogo izucheniya lechebnykh svoystv novykh antibiotikov (zav. prof. V.A.Shorin) Instituta po izyskaniyu novykh antibiotikov AMN SSSR.

(DYSENTERY)

(OMYCETIN)

(GLYCOGEN)

(TOXINS AND ANTITOXINS)

LYASHENKO, V.A.

Influence of cortisone on the therapeutic effect of levomycetin at various stages of experimental infection in connection with hormonal influence on phagocytosis. Antibiotiki 6 no.6:504-507 Ja '61.
(MIRA 15:1)

1. Laboratoriya po izucheniyu lechebnykh svoystv novykh antibiotikov (zav. - prof. V.A.Shorin) Instituta po izyskaniyu novykh antibiotikov AMN SSSR.

(CORTISONE) (CHLORAMYCETIN) (PHAGOCYTOSIS)
(DYSENTERY)

SHORIN, V.A.; ROSSOLIMO, O.K.; LYASHENKO, V.A.; SHAPOVALOVA, S.P.

Antibacterial and antineoplastic properties of the antibiotic
6613. ~~Antibiotiki~~ 6 no.11:979-983 N '61. (MIRA 15:3)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS)
(CYTOTOXIC DRUGS)

SHORIN, V.A.; LYASHENKO, V.A.

Results of a primary evaluation [of the effect] of new antitumor antibiotics on various transplanted tumors in animals. Antibiotiki 7 no.1:27-31 Ja '62. (MIRA 15:2)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS) (TUMORS)

SHORIN, V. A.; LYASHENKO, V. A.

"New research data on the therapeutic efficacy of the antibiotic olivomycin."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Search of New Antibiotics, AMS USSR, Moscow.

LYASHENKO, V.A.

Effect of passage w't'i myelosan on the sensitivity to olivomycin of sarcoma 180 and NK/LY mouse lymphadenosis. Antibiotiki 9 no.3:244-249 Mr '64. (MIRA 17:12)

1. Laboratoriya eksperimental'nogo izucheniya lechebnykh svoystv novykh antibiotikov (zav. - prof. V.A.Shorin) Instituta po izyskaniyu novykh antibiotikov AMN SSSR, Moskva.

L 16283-65 EWT(1)/EEG(b)-2/RED-2/EEG(g) Pt-10 IJP(c)
ACCESSION NR: AP4045499 S/0109/64/009/009/1712/1714

AUTHOR: Lyashchenko, V. A.; Kovtun, N. K.

TITLE: Miniature resonance ferrite isolator in symmetrical ridged waveguides

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, 1712-1714

TOPIC TAGS: symmetrical ridged waveguide, resonance ferrite isolator, miniature ferrite isolator, ferrite isolator, π -section waveguide

ABSTRACT: Properties and characteristics of miniature resonance ferrite isolators for use in π -section waveguides were experimentally investigated. The dimensions of this waveguide are shown in Fig. 1 of the Enclosure. The rectangular ferrite element was tested both in one of the waveguide arms and in the connecting gap. Magnetization was in the direction perpendicular to the wide wall of the waveguide. The graphs in Fig. 1 illustrate the relationship between the loss in forward and reverse waves, and field intensity for various positions of the ferrite plate inside the waveguide at $f=27254c$.

Card 1/4

L 16283-65

ACCESSION NR: AP4045499

0

Data for various thicknesses of ferrite also show that the attenuation vs. field characteristic has two absorption peaks which merge into one at a critical ferrite width — in the present case, 3.35 mm. The resulting peak is wider than either separate peak, while its attenuation is lower. In the distribution of the magnetic field for the fundamental oscillation mode in a π -form waveguide, the field components vary sharply in the vicinity of the inner leg walls, consequently, the field will differ greatly from point to point in a ferrite element in this region; thus, it is impossible to secure a field structure at which the loss is reduced to a suitable minimum. Best overall results were found by mounting the isolator on a dielectric base and locating the combination asymmetrically in the center gap of the guide. This yielded not less than 20 db decoupling, forward less of not over 2 db, and a VSWR not over 1.15, at the design frequency of $f = 2725$ Mcps $\pm 25\%$. Orig. art. has: 5 figures.

Card 2/4

L 16283-65
ACCESSION NR: AP4045499

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M.
Gor'kogo (Kharkov State University)

SUBMITTED: 14Nov63

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 002

Card3/4

L 16285-65
ACCESSION NR: AP4045499

ENCLOSURE: 01

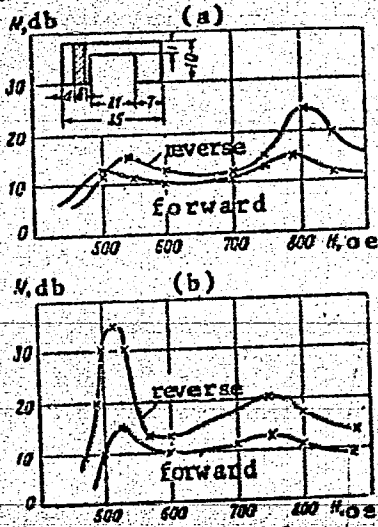


Fig. 1. The relationship between forward and reverse attenuation and magnetic field intensity at two positions of a ferrite isolator in a π -form waveguide.

(a) - $d = 0$; (b) - $d = 3$ mm; $b = 4$ mm.

Card 4/4

L 56033-65

ACCESSION NR: AP5018382

UR/0297/64/009/011/0987/0993

AUTHOR: Lyashenko, V. A.

4
B

TITLE: Combined effect of two antitumorous preparations -- Sarcolysin and Olivomycin -- on hemopoieses and tumor growth

SOURCE: Antibiotiki, v. 9, no. 11, 1964, 987-993

TOPIC TAGS: experiment animal, antibiotic, drug treatment, therapeutics

ABSTRACT: Investigations were conducted to determine the effect of the combined action of olivomycin and sarcolysin, an antitumorous preparation which has a pronounced effect on leukopoieses and lymphopoiesis in particular. The following method of investigation was used; albino nonbred mice 16-18 grams in weight were inoculated with Crocker's sarcoma 180. Therapy was begun on the third day after the inoculation. Olivomycin was administered to the animals internally every other day in doses of 4.5-5.5 milligrams per kilogram body weight; sarcolysin -- in doses of 3.5-5.5 milligrams per kilogram body weight intra-

Card 1/3

L 56033-65
ACCESSION NR: AP5018382

peritoneally every other day. When used in combination the preparations were administered to the animals in half of the above doses on the same day (four times in all). In about 10-11 days after the inoculation the animals were sacrificed, and the leukocyte formula, the blood content of leukocytes and the weights of animals, tumors, and spleen were determined. The investigations

established that olivomycin in doses of 3.5-five milligrams per kilogram body weight induces moderate leukopenia in mice inoculated with sarcoma 180; equal doses of sarcolysin induce a more severe form of leukopenia and a more expressed form of lymphocytopenia than olivomycin; the combined application of half-doses of both preparations elicits a therapeutic effect similar to that produced by the full dose of either of the preparations separately; therapeutic doses of olivomycin decrease the absolute and relative content of deoxyribonucleic acid, and the absolute content of ribonucleic acid in the spleen of mice; sarcolysin has a greater effect on leukopenia than olivomycin.

Card 2/3

L 56033-65
ACCESSION NR: AP5018382

ASSOCIATION: Laboratoriya eksperimental'nogo izucheniya lechebnikh svoystv novykh antibiotikov Instituta po izyekanuyu novykh antibiotikov AMN SSSR, Moscow
(Laboratory of the Experimental Investigation of the Therapeutic Properties of New Antibiotics, Institute for the Search of New Antibiotics, AMN SSSR)

SUBMITTED: 19Mar4

ENCL: 00

SUB CODE: LS

NR REF SOV: 009

OTHER: 007

JPRS

Card 5/3

LYASHENKO, V.A., kand. med. nauk

Disorders of the growth of bones in a late period following
an electric trauma. Vest. rent. i rad. 39 no.3:68-69 My-Je
'64. (MIRA 18:11)

1. Ortopedicheskoye otdeleniye (zav. - kand. med. nauk
V.A.Lyashenko) 1-y bol'nitsy Yuzhnoy zheleznoy dorogi.

L 34467-55 EWT(m)/EPF(n)-2/ENG(m)/ENP(t)/ENP(b) Pu-4 IJP(c) RHE/JD/RW/

ACCESSION NR: AT5013643 JG/GS/RM UR/0000/65/000/000/0096/0103 27
543.21:543.544.6:548.841 +546.3 26
2-1

AUTHOR: Kazantsev, Ye. I.; Kudusov, V. A.; Korobeynikov, V. L.; Lyashenko, V. A.

TITLE: Study of the separation of thorium from ions of certain metals on the anion exchanger AV-17 from nitric acid solutions

SOURCE: AN SSSR, Otdeleniye obshchey i tekhnicheskoy khimii. Radiokhimicheskiye metody opredeleniya mikroelementov (Radiochemical methods for determining trace elements); sbornik statey. Moscow, Izd-vo Nauka, 1965, 96-103

TOPIC TAGS: column chromatography, anion exchange resin, ¹⁷thorium separation, nitric acid concentration

ABSTRACT: The article is devoted to the separation of gravimetric amounts of a series of di- and trivalent ions from thorium in nitric acid solutions on the strongly basic anion exchanger AV-17x6. The adsorbability of Th was found to depend strongly on the HNO₃ concentration. The dynamic capacity of the column for thorium was studied as a function of HNO₃ concentration, temperature, amount of anion exchanger, and presence of certain reagents. All the ions studied were divided into three groups according to their capacity of being adsorbed and

Card 1/2

L 54467-65

ACCESSION NR: AT5013643

eluted: (1) thorium ions, which are adsorbed in considerable quantities and are not eluted to any appreciable extent by 7 N HNO₃; (2) ions of La, Ce(III), Bi, Pb, Co, Ni, Cu, U(VI), and Al, which are adsorbed in small quantities; (3) ions of Fe(III), Cr(III), Zn, Cd, Mg, Mn(II), and Ca, which are not adsorbed by the resin. Ions of metals of groups 2 and 3, with the exception of U(VI), are quantitatively eluted from the resin by 7 N HNO₃. Thus, the results of the experiments show that Th can be separated from metals of groups 2 and 3. It was found that U^{IV} could be separated from Th most effectively on the KU-2 resin from HNO₃ solutions less than 2.5 N, and on the AV-17x6 resin from HNO₃ solutions more than 2.5 N. A simple procedure is proposed for the separation of the thorium isotope UX₁ from uranium solutions. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: None

SUBMITTED: 21Oct63

NO REF SOV: 009

ENCL: 00

SUB CODE: IC, GC

OTHER: 011

128
Card 2/2

LYASHENKO, V.A.; KOLESNIKOVA, L.P.

Changes in the populations of ascite cells following treatment
with two anticancer substances. Antibiotiki 10 no.8:724-
730 Ag '65. (MIRA 19:9)

1. Institut po izyskaniyu novykh antibiotikov, Moskva.

LYASHENKO, V.A.; KOLESNIKOVA, L.P.

Experimental of anticarcinogenic substances on the formation
of hemolysins. Antibiotiki 10 no.9:808-816 S '65. (MIRA 18:9)

1. Institut po izyskaniyu novykh antibiotikov, Moskva.

IYASHENKO, V.A.

Effect of cytostatic substances on the immunological reactivity of
the body. Vest.AMN SSSR 20 no.7:72-79 '65. (MIRA 18:8)

1. Moskovskiy nauchno-issledovatel'skiy institut vaktsin i
sy'rotok imeni I.I.Mechnikova Ministerstva zdravookhraneniya
SSSR.

36046

S/040/62/026/002/020/025
D299/D301

13.2521

AUTHOR: Lyashenko, V. F. (Moscow)

TITLE: On the reducibility of the equations of motion of a gyrocompass and of two-gyroscope verticals

PERIODICAL: Prikladnaya matematika i mekhanika, v. 26, no. 2, 1962, 369 - 372

TEXT: Some results of V.N. Koshlyakov are generalized (Ref. 1: 0 Privodimosti uravneniy dvizheniya girogorizontkompasa, PMM, 1961, v. 25, no. 5). The transition to the simplified Geckeler equations is substantiated for an arbitrary motion of the support point of the gyrocompass; the proof is based on N.P. Yerugin's theorem (Ref. 2: Privodimyye sistemy. L.-M, Izd-vo, AS SSSR, 1946). The equations of the perturbed motion of a gyrocompass in the absence of damping are

$$mlv \frac{d\alpha}{dt} + ml \frac{dv}{dt} \alpha - mgl\beta - \Omega 2B \sin \epsilon^0 \delta = 0 \quad \frac{d\beta}{dt} + \frac{v}{R} \alpha - \Omega \gamma = 0 \quad (1.1)$$

$$\frac{d\gamma}{dt} + \frac{2B \sin \epsilon^0}{mlR} \delta + \Omega \beta = 0, \quad \frac{d}{dt} (2B \sin \epsilon^0 \delta) - mgl\gamma + mlv\Omega\alpha = 0$$

Card 1/3 $v = \sqrt{(Ru \cos \varphi + v_E)^2 + v_N^2}, \Omega = u \sin \varphi + \frac{v_E}{R} \operatorname{tg} \varphi - \dot{\alpha}^*, \alpha^* = -\frac{v_N}{Ru \cos \varphi + v_E}$

(1.1) f

On the reducibility of the equations ... S/040/62/026/002/020/025
D299/D301

where B is the kinetic moment of the rotor; ε^0 - an equilibrium position of the tracking angle; α - the angle of deviation of the gyroscope axis; β , γ and δ - other angles related to the rotation of the gyrosphere; l - its metacentric height; R - the earth's radius; U - the angular velocity of the earth's rotation; φ - the latitude of the ship's position; v_E and v_N - eastern and northern velocity-components of the support point. Assume the ship maneuvers at the given latitude φ . New variables are introduced:

$$\alpha = \frac{RU \cos \varphi}{v} x_1, \quad \beta = x_2, \quad \gamma = x_3, \quad \delta = \frac{\sin \varphi}{\sin \varepsilon^0} x_4. \quad (1.2)$$

With new variables, system (1.1) is written:

$$\begin{cases} \frac{dx_1}{dt} - \frac{v^2}{U \cos \varphi} x_2 - \lambda_1 \operatorname{tg} \varphi \Omega x_4 = 0, & \frac{dx_2}{dt} + U \cos \varphi x_1 - \Omega x_3 = 0 \\ \frac{dx_3}{dt} + \frac{2B \sin \varphi v^2}{Pl} x_4 + \Omega x_2 = 0, & \frac{dx_4}{dt} - \frac{Pl}{2B \sin \varphi} x_3 + \frac{1}{\lambda_1} \operatorname{ctg} \varphi \Omega x_1 = 0 \end{cases} \quad (1.3)$$

$$\left(v = \sqrt{\frac{g}{R}}, \lambda_1 = \frac{2Bv^2}{PlU} \right)$$

By using the substitution formulas of Ref. 1 (Op.cit.) it is possible
Card 2/3

S/040/62/026/002/020/025

On the reducibility of the equations ... D299/D301

ble to reduce system (1.5) to the Schuler-Geckeler equations. The substitution of Ref. 1 (Op.cit.) is applicable to any type of function $\Omega(t)$. Yet in Ref. 1 (Op.cit.) it is substantiated only for the particular case of $\Omega(t)$ being a periodic function of time. The author proves (by means of Yerugin's theorem), that the transition to the Schuler-Geckeler system can be effected for any $\Omega(t)$. Thereby 2 complex-valued functions are introduced. After transformations, the Schuler-Geckeler system is obtained in the form

$$\frac{d\eta_1}{dt} - \nu\eta_2 = 0, \quad \frac{d\eta_2}{dt} + \nu\eta_1 = 0, \quad \frac{d\eta_3}{dt} - \nu\eta_4 = 0, \quad \frac{d\eta_4}{dt} + \nu\eta_3 = 0. \quad (3.6)$$

The above considerations can be extended, without any modification, to the equations of two-gyroscope verticals, given in the references. There are 4 Soviet-bloc references.

SUBMITTED: November 22, 1961

Card 3/3

J

S/040/63/027/002/017/019
D251/D308

AUTHOR: Lyashenko, V. F. (Moscow)

TITLE: On the theory of the gyroscopic horizon compass

PERIODICAL: Prikladnaya matematika i mekhanika, v. 27, no. 2,
1963, 373-376

TEXT: The author generalizes the results of A. Yu. Ishlinskiy (PMM, v. 20, no. 4, 1956). Taking into account the inertial terms and the vertical accelerations caused by the movement of the base, the equations of motion of a gyrocompass are obtained in the form

$$L_x = - ml \left[\left(\frac{dv}{dt} + \frac{v}{R} \dot{R} \right) (-\sin \alpha \cos \beta) + v \Omega \cos \alpha \cos \beta + \left(\ddot{R} - \frac{v^2}{R} \right) \sin \beta \right]$$

$$L_y = ml \left[\left(\frac{dv}{dt} + \frac{v}{R} \dot{R} \right) (\cos \alpha \cos \gamma - \sin \alpha \sin \beta \sin \gamma) + v \Omega (\sin \alpha \cos \gamma + \right.$$

Card 1/2

On the theory of ...

S/040/63/027/002/017/019
D251/D308

$$L_z = 0 \left[+ \cos \alpha \sin \beta \sin \gamma + \left(R - \frac{v^2}{R} \right) (-\cos \beta \sin \gamma) \right] \quad (1.14)$$

where R is the radius of the earth, Ω is the angular velocity of the gyroscope, L_x, L_y, L_z are the moments of the inertial forces of the motion for moving axes, α is the angle of azimuthal deviation, β the inclination of the north end of the compass axis to the tangent plane of the earth, and γ the angle of rotation about the N-S line. It is shown that Ishlinskiy's conditions of aperiodicity are insufficient in this case and must be replaced by a more complicated condition which may be of two kinds and which includes compensatory moments.

SUBMITTED: October 2, 1962

Card 2/2

KOSHLyakov, V.N. (Moskva); LYASHENKO, V.F. (Moskva)

On a certain integral in the gyrocompass theory. Prikl. mat.
i mekh. 27 no.1:10-15 Ja-F '63. (MIRA 16:11)

KOSHLIYAKOV, V.N. (Moskva); LYASHENKO, V.F. (Moskva)

Stability of gyrocompasses. Prikl. mat. i mekh. 27 no.5:885-887
S-0 '63. (MIRA 16:10)

ACCESSION NR: AP4015974

S/0040/63/027/005/0885/0887

AUTHORS: Koshlyakov, V. N. (Moscow); Lyashenko, V. F. (Moscow)

TITLE: Gyrocompass stability

SOURCE: Prikl. matem. i mekhan., v. 27, no. 5, 1963, 885-887

TOPIC TAGS: gyrocompass, stability, two rotor gyrocompass, motion equation, regenerating moment, gyroscope, gyrosphere, sufficient condition, equilibrium, Gekkeler-Anshyuts spatial gyrocompass

ABSTRACT: This is a development of the work of V. N. Koshlyakov and V. F. Lyashenko (Ob odnom integrale v teorii girogorizontkompasa. PMM, 1963, t. XXVII, vyp. 1). The authors study, in a strict formulation (for the nonlinear case and without recourse to precession theory) the stability of motion of two-rotor gyrocompasses not having the properties of the spatial gyrocompass of Gekkeler-Anshyuts. They give the first integral of the equations of motion, which is used to obtain sufficient conditions for stability of the unperturbed motion of the system. Orig. art. has: 18 formulas.

Card 1/1

LYASHENKO, V.F. (Moskva)

Stability of the motion of a gyroscopic pendulum. Izv.AN SSSR.
Mekh. i mashinostr. no.4:3-6 J1-Ag '63. (MIRA 17:4)

LYASHENKO, V.F. (Moskva)

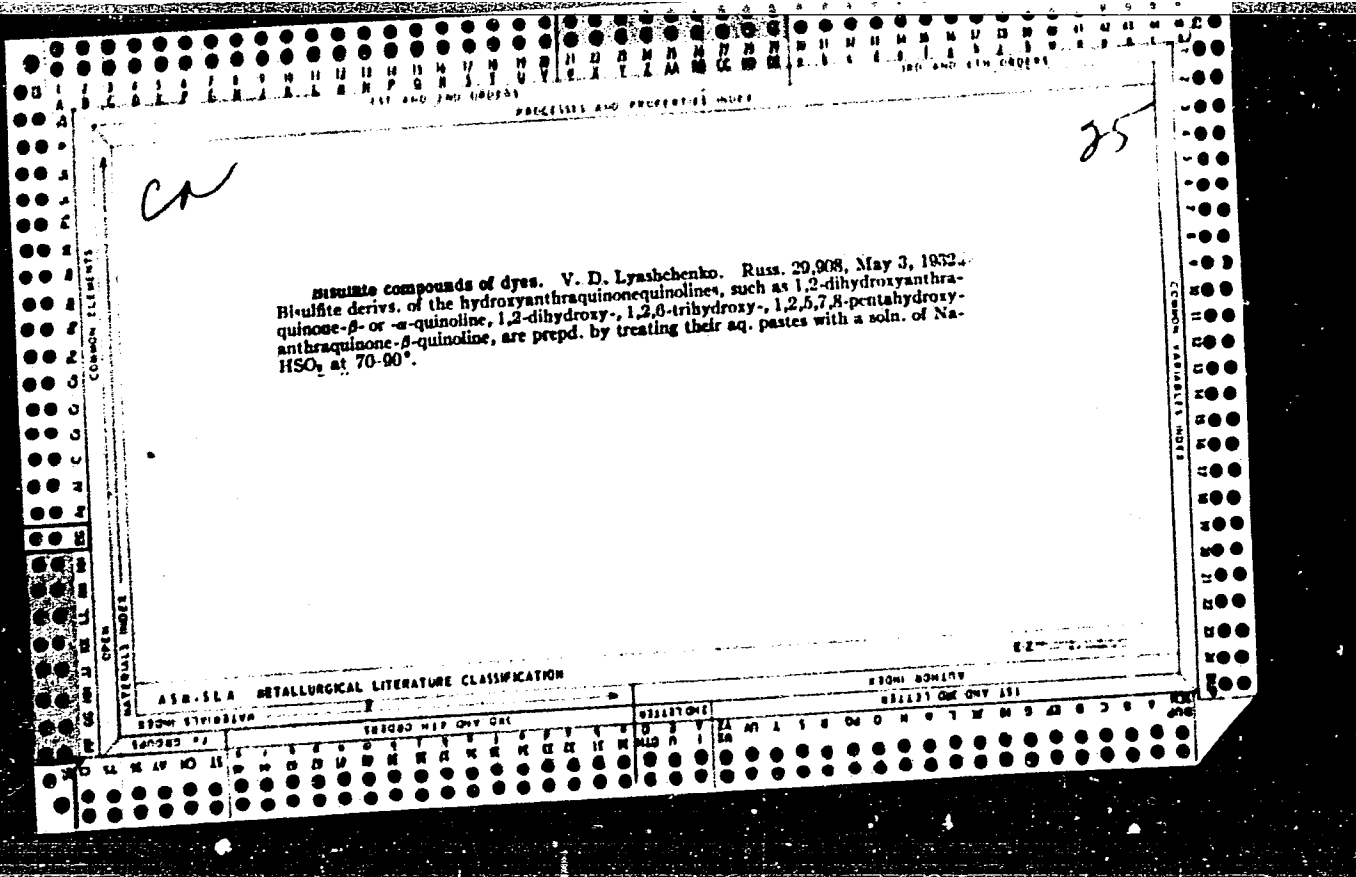
Sufficient conditions for equilibrium in the theory of gyrocompasses.
Prikl. mat. i mekh. 27 no.6:1106-1107 N-D '63. (MIRA 17:1)

LYASHENKO, V.F. (Moskva)

Integrating equations of the motion of a gyroscopic pendulum
in finite angles. Izv. AN SSSR. Mekh. i mashinostr. no. 2:
160-161 Mr-Ap '64. (MIRA 17:5)

LYASHENKO, V.F. (Moskva)

Stability of monogyroscopic systems. Izv. AN SSSR Mekh. i mashinestr.
no.5:117-119 S-0 '64 (MIRA 18:1)



25

PROCESSING AND PROPERTIES INDEX

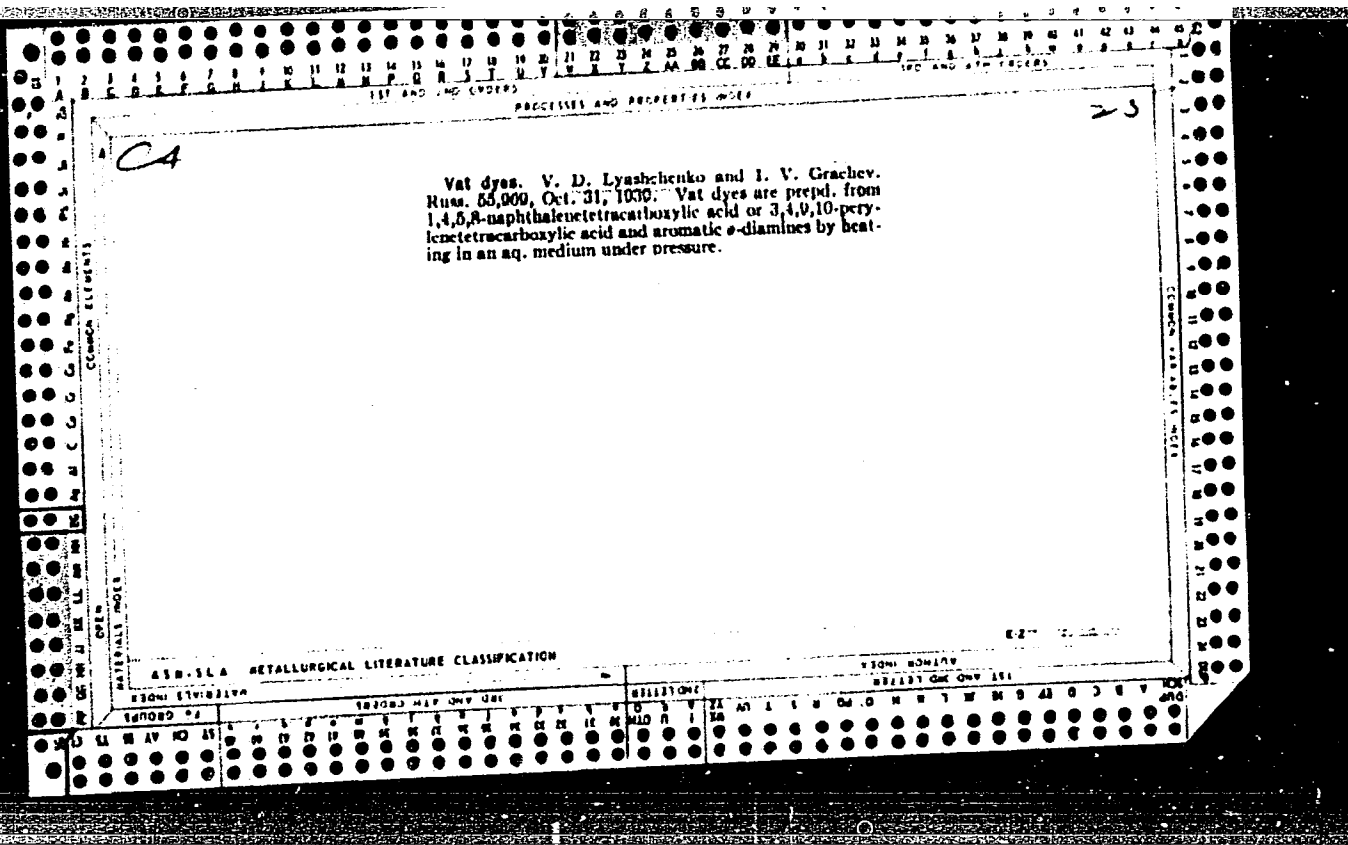
ca

Analysis of rubber colors. A. P. Ershov, V. D. Lyashenko and I. V. Grachev. *Anilinokrasochnyaya 1974*, 4, 306-12 (1934).—The structural formulas of the following trade dyes were obtained by analysis and synthesis: *Vulcanosine Violet BB (Ba salt)*, from benzoylated H acid and diazotized α -C₁₀H₇NH₂, is Ba 4-benzamido-5-hydroxy-6-(1-naphthylazo)-2,7-naphthalenedisulfonate; *Vulcanosine Red 5 B (Ba salt)* from diazotized *o*-anisidine and 2,4-dichlorobenzoyl-H acid in alk. medium, is Ba 2-anisylazo-5-(2,4-dichlorobenzamido)-2,7-naphthalenedisulfonate; *Vulcan Orange G extra*, from 4,4'-(2-ClC₆H₄-N₂Cl)₂ and phenylmethylpyrazolone, is (MeC₆H₄N₂Ph₂CO.CHN:NC₆H₄Cl). *Vulcan Blue GGS*, analyzed and tested spectrophotometrically, corresponds to Indanthrene Blue 2 GB (No. 1236, Schultz Farbatoff tabellen) and belongs to the group of hydroxyindanthrenes of unknown structure. Chas. Blanc

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

RELEASING OFFICE



1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES - III

18

3-Chloroacetylnaphthene and its formation in the Friedel-Crafts synthesis of 8-chloroacetylnaphthene. V. D. Lyashchenko, T. A. Sokolova, and V. V. Zelinskii. *J. Gen. Chem. (U.S.S.R.)* 11, 1001-6(1941).—When $AlCl_3$, acenaphthene, and C_6H_5COCl react in $PhCl$ at 0° they give 90% of a mixt. of chloroacetylnaphthenes. This contains 18% 3-chloroacetylnaphthene (I), m. $164-4.5^\circ$, as well as the 8-isomer, m. $106.6-7^\circ$. The structures are proved by oxidation to the corresponding acids. At 0° the compds. form a eutectic mixt. contg. 14% I. The isomers form an unstable mol. compd. which decomp. about 104° . H. M. Leicester

INTERNAL NUMBER

OPEN

GROUPS

ALPHABETICAL LITERATURE CLASSIFICATION

GROUPS

ALPHABETICAL

GROUPS

ALPHABETICAL

LYASHENKÓ, V. D.

Structure of dihydroindanthrene and of its disulfate.

V. D. Lyashenko and N. A. Kirzner (Leningrad Research Inst. *Vostochnaya*). *J. Gen. Chem.* (U.S.S.R.) 16, 583-92 (1946). -- The fine structure of indanthrene is characterized by the presence of a resonant system which connects, by H bonds, the pyrazine ring with the two carbonyl of both anthraquinone residues. For this reason its chemical properties, which are functionally dependent on the pyrazine and anthraquinone nuclei, are concealed and may be revealed only under rather drastic conditions. In the reduction of the compd. the addn. of 2 H occurs to 2 carbonyls which are in different anthraquinone rings; this accounts for the undisturbed state of stability of the molecule energetic hydrogenation leads to formation of bis-(anthrahydroquinono)dihydropyrazine. Dihydroindanthrene (prepd. conventionally by reduction of indanthrene by hydrosulfite in alk. soln.) was pptd. by acidification with 20% H₂SO₄ and dried by heating with PhCl *in vacuo*; the dry product was sulfated in pyridine (German patent 424,981) and the disulfate was pptd. from aq. soln. by acidification and purified through the triethanolamine salt. *K* 2-aminoanthrahydr.quinone-9,10-disulfate (45 g.) was oxidized in alk. soln. according to Ger. pat. 470,809; after removal of the excess oxidizing agent, the soln. of the tetrasulfate was acidified, yielding a red-violet ppt. of dihydroindanthrenedisulfate; if, however, the soln. is not acidified but concd. and treated with KCl (German patent 574,199) there are obtained yellow crystals of tetra-*K* (bisanthrahydroquinono-1,2)pyrazinetetrasulfate, which

is readily converted into the above disulfate by dil. acids. The tetrasulfate was also obtained by adding 25 g. Fe filings and 22 g. dianthraquinoneazine to 20 g. SO₃ in 250 g. dry pyridine in a N atm., heating 1-2 hrs. to 75°, followed by treatment with an ice-KOH mixt., again heating to 40°, and concg. *in vacuo* after filtration. *K* tetrasulfate (20 g.) in 100 cc. water was treated with 80 g. 20% KOH and 8 g. hydrosulfite 15 min. at 40°, then with 40 g. KCl, and cooled to 5°, yielding a green ppt. (unstable in air) which was a mixt. of tetra-*K* bisanthrahydroquinone(dihydropyrazine)disulfate and its quinhydrone-type compd. with bisanthrahydroquinone(pyrazine)tetrasulfate; this gave in water a dark brown soln. which changed to yellow-brown on contact with air and on acidification in contact with air changed to green, then to red, with simultaneous pptn. of a red-violet ppt. of dihydroindanthrenedisulfate.

G. M. Kosolapoff

2

The reaction of diketene with aromatic amines. V. D. Lyashenko and T. A. Bobotova. *J. Gen. Chem. (U.S.S.R.)* 17, 1968-75(1967).—The speed of the reaction between diketene and the following amines was studied: *o*- and *p*-anisidine, *o*-, *m*-, and *p*-toluidine, *o*-chloroaniline, *p*-nitroaniline, aniline, and *o*- and *p*-naphthylamine. The solvents used were PhH, PhMe, 1,2-dichloroethane, tetralin, and Me₂CO. The reaction was followed by pipetting samples of the reaction mixts. into an excess of NaOH, and back-titrating with HCl. Reaction-rate consts. were calcd. on the basis of a 2nd-order reaction. A graph of the log of the reaction-rate const. against the log of the disocn. consts. of the amines gave a straight line for each of the 5 different solvents; all of the lines had the same slope. In dichloroethane, e.g., values for specific reaction consts. (l./mole min.) at 10° and the disocn. consts., resp., for the following amines are: *p*-anisidine, 0.29, 1.96×10^{-10} ; *p*-toluidine, 0.11, 1.20×10^{-10} ; *m*-toluidine, 0.08, 4.92×10^{-10} ; aniline, 0.07, 3.82×10^{-10} ; *o*-anisidine, 0.06, 3.11×10^{-10} ; *o*-toluidine, 0.02, 7.3×10^{-11} . In tetralin, the values for the specific reaction rate consts. for these amines are, resp., 0.6, 0.3, 0.2, 0.14, 0.12, 0.04. The differences in reactivity of the different amines are related to the effect of the introduction of an unshared electron pair from the N in the NH₂ group into the carbonyl C in diketene.

Arild J. Müller

ASTM-51A METALLURGICAL LITERATURE CLASSIFICATION

ESCHERICHY

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	00
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

SEMENOV, L.F.; BOL'SHAKOVA, G.A.; LYASHENKO, V.D.

Synthesis of new amino and mercapto compounds and their experimental testing in radiation sickness. Vop.radiobiol. 2: 389-393 '57. (MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgenoradiologicheskogo instituta Ministerstva zdravookhraneniya SSSR. (RADIATION SICKNESS) (UREA) (ETHANETHIOL)

5.3600

77372

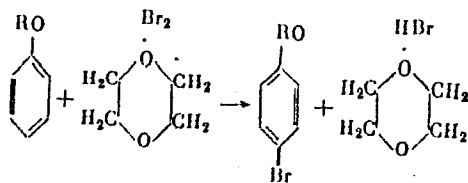
SOV/79-30-1-33/78

AUTHORS: Karpinskiy, V. S., Lyasheko, V. D.

TITLE: Investigation of Bromination with Dioxane Dibromide.
I. Kinetics and Mechanism of Bromination With Dioxane
Dibromide

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 154-
159 (USSR)

ABSTRACT: The stoichiometric equation of bromination of phenyl
ethers with dioxane dibromide (DDB) is given below:



Card 1/3

Investigation of Bromination with
Dioxane Dibromide. I. Kinetics and
Mechanism of Bromination With Dioxane
Dibromide

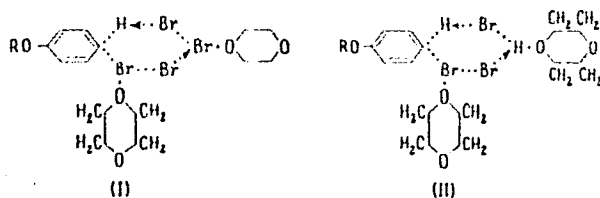
77372
SOV/79-30-1-33/78

The above bromination is a third-order reaction, and the rate of reaction is proportional to the square of the concentration of DDB and to the concentration of ether. According to modern concepts, the activity of such halogenating agents depends on the degree of polarization of bonds Br-X. It is known that in DDB the bromine bond is more polarized than in the bromine molecule. Therefore, the bromination activity of DDB is higher than that of the bromine molecule. Bromination of phenyl ethers with DDB is an electrophilic substitution. The thermolecular mechanism of the reaction is apparently determined by an insufficient donor activity of the π -carbon. Increasing of latter by the protonating influence of the other molecule of DDB makes the reaction go through an intermediate complex (I). This is in agreement with the reaction rate in the presence of dioxane hydrobromide; a large excess of the latter makes the kinetics of the reaction second order, because of the formation an intermediate complex (II).

Card 2/3

Investigation of Bromination with
Dioxane Dibromide. I. Kinetics and
Mechanism of Bromination With Dioxane
Dibromide

77372
SOV/79-30-1-33/78



There are 2 figures; 8 tables; and 11 references, 8 Soviet, 2 U.S., 1 Danish. The U.S. references are: G. M. Kosolapoff, J. Am. Chem. Soc., 75, 3596 (1953); C. Price, C. Weaker, *ibid.*, 61, 3360 (1939).

ASSOCIATION: Leningrad Chemical-Pharmaceutical Institute (Leningradskiy khimiko-farmatsevticheskiy institut)

SUBMITTED: December 30, 1958
Card 3/3

ZAYTS, K.A.; LYASHENKO, V.D.

Reactions of benzenesulfonyl chloride with alcohols. Zhur. ob.
khim. 30 no.11:3750-3755 N'60. (MIRA 13:11)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Benzenesulfonyl chloride)

BATUNER, L.M.; LYASHENKO, V.D.; VOVSI, B.A.; VITENBERG, A.G.

Thermokinetics of the catalytic decomposition of o-methoxyphenyl
diazonium sulfate. Trudy Len. khim-farm. inst. no.14:113-122
'62 (MIRA 17:12)

ZAYTS, K.A.; LYASHENKO, V.D.

Reactions of benzenesulfonyl chloride with alcohols and
phenols. Zhur.ob.khim. 32 no.11:3833-3838 N '62. (MIRA 15:11)
(Alcohols) (Benzenesulfonyl chloride) (Phenols)

KARPINSKIY, V. S.; LYASHENKO, V. D.

Bromination by dioxane dibromide. Part 2: Kinetics and
mechanism of phenol bromination. Zhur. ob. khim. 32 no.12:
3997-4004 D '62. (MIRA 16:1)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

(Phenol) (Bromination) (Dioxane)

KARPINSKIY, V.S.; LYASHENKO, V.D.

Bromination by dibromodioxane. Part 3: Effect of a substituent
in a ring and in a phenol hydroxyl group on the rate of
bromination. Zhur.ob.khim. 33 no.2:606-609 F '63.

(MIRA 16:2)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Dioxane) (Bromination)

LYASHENKO, V.D. [deceased]; KOLESOVA, M.B.; ALEKSANDR, Kh.L.; SHEREMET'YEVA,

~~V.A.~~

Sulfur-containing derivatives of purines and pyrimidines. Zhur.
ob. khim. 34 no.8:2752-2756 Ag '64. (MIRA 17:9)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

LYASHENKO, V.D.
BEN YAMINSON, V.Ye., inzh.; DOLIN, P.A., kand. tekhn. nauk; LYASHENKO, V.D.,
inzh.

New high-power laboratory for testing high-voltage apparatus. Elek.
sta. 29 no.2:67-70 F '58. (MIRA 11:3)
(Electric laboratories)

CHERNYSHEV, N.M., kand.tekhn.nauk; LYASHENKO, V.D., inzh.

Synchronizing device with a synthetic circuit for testing the
interrupting capacity of circuit breakers. Elektrichestvo no.2:
53-57 F '60. (MIRA 13:5)

1. Vsesoyuznyy elektrotekhnicheskiy institut imeni Lenina.
(Electric circuit breakers--Testing)

LYASHENKO, V.D., inzh.

Measurement of large transient currents. Elektrichestvo.
no.8:46-50 Ag '61. (MIRA 14:10)

1. Vsesoyuznyy elektrotelhnicheskiy institut im. Lenina.
(Electric currents—Measurement)

KRUGLIKOV, V.M.; SHAL'NEVA, A.M.; GUZACHEVA, V.Ya.; ZAYTSEV, A.A.; LYASHENKO, V.D.;
POPOVA, Ye.V.

Studies of natural foci of leptospirosis in certain region of the Stav-
ropol Territory. Zhur. mikrobiol. epid. i imun. 29 no.8:51-54
Ag '56. (MIRA 11:10)

1. Iz Stavropol'skogo instituta vaktsin i syvorotok i Krayevoy sanitarno-
epidemiologicheskoy stantsii.

(LEPTOSPIROSIS, epidemiology,
natural foci in Russia (Rus))

L 53781-65 EEO-2/ENT(d)/FSS-2/EEC(k)-2/ENG(v)/EED-2/EWA(c) Pn-4/Po-4/Pe-5/
Pg-4/PK-4/PL-4/Pq-4 BC

ACCESSION NR: AP5017196

UR/0179/64/000/005/0117/0119

AUTHOR: Lyashenko, V. F. (Moscow)

49
0

TITLE: Stability of multigyroscopic systems 9

SOURCE: AN SSSR. Izvestiya. Mekhanika i mashinostroyeniye, no. 5, 1964, 117-119

TOPIC TAGS: solid dynamics, gyroscope system, gyrocompass, motion stability

Abstract: The authors examine the Lyapunov motion of a solid body with a single fixed point which moves along the spherical surface of the earth, a gyroscope being located within the solid body. The energy integral of the system is given, this function being used to obtain the sufficient conditions for stability of undisturbed motion of the system. Special cases of the problem are examined in application to a monogyroscopic compass, gyropendulum and physical spherical pendulum. Orig. art. has 26 formulas.

ASSOCIATION: none

SUBMITTED: 27Mar64

ENCL: 00

SUB CODE: NG, ME

NO REF SOV: 006

OTHER: 000

JPRS

Card 1/1 000

L 1461-66 EWT(d)/FSS-2/EEC(k)-2/EED-2/EWA(c) BC
ACCESSION NR: AP5021716

UR/0373/65/000/004/0121/0123

AUTHOR: Lyashenko, V. F. (Moscow)

TITLE: Stability of polygyroscopic systems

74
B

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 4, 1965, 121-123 .

TOPIC TAGS: gyroscope, stability criterion, gyroscope system, gyroscope stability

ABSTRACT: The stability of the Lyapunov motion of a heavy solid body, with a single fixed point, moving on the surface of the terrestrial sphere is considered. Inside the body a set of gyroscopes is placed with variable kinetic moments relative to the body. These kinetic moments of the gyroscope H_x, H_y, H_z are assumed to satisfy the equalities

$$\frac{d^2 H_x}{dt^2} = -H_x \quad (xuz, 123)$$

$$p \frac{dH_x}{dt} = \frac{1}{2} \frac{d}{dt} \left(m_1 v_1^2 + \frac{1}{n_1} H_x^2 \right) \quad (pqr, xuz, 123)$$

The energy integral of the system is written from which is determined a set of five stability criteria corresponding to the unperturbed motion of the body. Two special cases are considered: 1) where $H_x = H_y = 0$, and 2) $H_x = H_z = 0$. For $l > 0$ (l is the distance from the point of support to the center of gravity) and $n_2 = m l R$ (R is Card 1/2

L 1161-66
ACCESSION NR: AP5021716

the earth's radius), the stability conditions for a gyrohorizontal compass are obtained. Orig. art. has: 25 equations.

ASSOCIATION: none ♦

SUBMITTED: 20 May 64

ENCL: 00

SUB CODE: NO

NO REF SOV: 005

OTHER: 000

Card 2/2

QA

LYASHENKO, V.F. (Moskva)

Stability of polygyroscopic systems. Izv. AN SSSR.Mekh.
no.4:121-123 J1-Ag '65.

(MIRA 18:12)