

STRAKOV, A.Ya.; GUDRINIYETSE, E.Yu.; IYEVIN'SH, A.F.; VANAG, G.Ya.

Sulfonation of β -diketones. Part 12: Sulfonation of 2-phenyl-1,3-indandione. Zhur. ob. khim. 30 no.12:3967-3972 D '60.
(MIRA 13:12)

1. Rizhskiy politekhnicheskiy institut.
(Indandione) (Sulfonation)

GUDRINIETSE, E. [Gudriniece, E.] (Riga); IEVIN'SH, A. [Ievins, A.] (Riga);
VANAG, G. [Vanags, G.] (Riga); KREYTSBERG, D. [Kreicberga, D.] (Riga)

Sulfonation of β -diketones. XV. Bindonesulfonic acid and its
salts. Vestis Latv ak no.2:111-114 '61. (EEAI 10:9)

1. Akademiya nauk Latvyskoy SSR, Institut khimii.

(Sulfonation) (Ketones) (Bindonesulfonic acid)

GUDRINIECE, E.; IEVINS, A.

Academician Gustavs Vanags; a biographic sketch. Vestis Latv ak
no.3:123-128 '61. (EEAI 10:9)

(Vanags, Gustavs) (Chemists, Latvian)

STRAKOV, A. Ya.; VANAG, G. Ya.; GUDRINETSE, E. Yu.

Sulfonation of β -diketones. Part 14: Derivatives of 2-(*p*-sul-
fophenyl)-1,3-indandione. Zhur. ob. khim. 31 no.3:906-911
Mr '61. (MIRA 14:8)

1. Rizhskiy politekhnicheskiy institut.
(Indandione) (Sulfonation)

GUDRINIYETSE, E. [Gudriniece, E.]

Gustav IAnovich Vanag; on the seventieth anniversary of his birth.
Zhur. ob. khim. 31 no.4:1047-1051 Ap '61. (MIRA 14:4)

1. Rizhskiy politekhicheskii institut.
(Vanag, Gustav IAnovich, 1891-)

STRAKOV, A.Ya.; NEYLAND, O.Ya. [Neilands, O.]; GUDRINIYETSE, E.Yu...
[Gudriniece, E.]; VANAG, G.Ya. [Vanags, G.], akademik

Sulfonation of 2-veratryl- and 2-piperonyl-1,3-indandiones. Dokl.
AN SSSR 141 no.2:374-377 N '61. (MIRA 14:11)

1. Rzhskiy politekhnicheskii institut. 2. AN Latvyskoy SSR
(for Vanag).

(Indandione) (Sulfonation)

S/081/63/000/003/013/036
B144/B186

AUTHORS: Liyelbriyedis, I., Gudriniyetse, E.

TITLE: Sulfur derivatives of dibenzofuran

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1963, 226-227, abstract 3Zh178 (Uch. zap. Rishsk. politekhn. in-t, v. 6, 1962, 103-109)

TEXT: By sulfonating dibenzofuran (I) with dioxane sulfur trioxide (II) or concentrated $H_2SO_4 + (CH_3CO)_2O$ the 2-sulfoacid of I (III) is obtained, as well as its salts, anhydride and substituted amides. By sulfonating III with $ClSO_3H$ the dichloride of 2,8-disulfoacid of I (IV) is obtained, which is further converted into N-(β -hydroxyethyl)-amide of IV (V). 7.4g of II is added to 5 g of I dissolved in 20 ml $(ClCH_2)_2$, stirred till dissolution occurs, and after some hours III is filtered off, yield 4.8 g, m. p. 145 - 147°C (from water). A mixture of 10 ml $(ClCH_2)_2$, 10 ml $(CH_3CO)_2O$ and 1 ml conc. H_2SO_4 is added to 2.4 g of I dissolved in Card 1/4

Sulfur derivatives of dibenzofuran

S/081/63/000/003/013/036
B144/B186

15 ml (ClCH_2)₂, after 2 hrs 1 ml concentrated HCl is poured in and III is obtained. By neutralizing the aqueous solution of III with soda or NaOH, the Na salt of III is obtained. An equimolar volume of aqueous solution of III is poured into 0.01 mole $\text{C}_6\text{H}_5\text{NHNH}_2$ dissolved in dilute HCl, and the phenyl hydrazine salt of III is filtered off, $\text{C}_{18}\text{H}_{17}\text{N}_2\text{O}_4\text{S}$, m. p. 193 - 195°C (from water). Compounds obtained analogously (here and below are given the compound, the gross formula and the m. p. in °C): α -naphthylamine salt of III, $\text{C}_{22}\text{H}_{17}\text{NO}_4\text{S}$, 267 (decomposition; from 50% alcohol); o-toluidine salt of III, $\text{C}_{19}\text{H}_{17}\text{NO}_4\text{S}$, 240 (decomposition, from alcohol); m-toluidine salt of III, $\text{C}_{19}\text{H}_{17}\text{NO}_4\text{S}$, 205 (from alcohol); aniline salt of III, $\text{C}_{18}\text{H}_{15}\text{NO}_4\text{S}$, 259 (decomposition; from alcohol). An aqueous solution of S-benzyl chloride is poured into a solution of III and the S-benzyl thiuronium salt of III is obtained, $\text{C}_{20}\text{H}_{18}\text{N}_2\text{O}_4\text{S}$, m. p. 191-193°C (from alcohol). The following were obtained analogously: p-nitro-phenyl diazonium salt of III, $\text{C}_{18}\text{H}_{11}\text{N}_3\text{O}_6\text{S}$, 143 - 144 (decomposition); m-nitro-Card 2/4

Sulfur derivatives of dibenzofuran

S/081/63/000/003/013/056
B144/B186

phenyl diazonium salt of III, $C_{18}H_{11}N_3O_6S$, 246 - 248 (decomposition). 0.27 g of III in 20 ml water is added to the aqueous solution of 0.13 g anthranilic acid (VI), boiled for 5 min, and the salt of VI and III is obtained, $C_{19}H_{17}NO_6S$, m. p. $222^{\circ}C$ (decomposition). 7 g of III and 20 g PCl_5 are kept for 6 hrs at $100^{\circ}C$, after cooling poured onto ice, and 6.3 g chloride of III is obtained, m. p. $137^{\circ}C$ (from CH_3COOH or toluene). The mixture of 1.04 g chloride of III, 60 ml o-xylene, and 1.24 g ethanol amine are heated for 2 hrs, and N-(β -hydroxy ethyl)-amide of III is obtained, $C_{14}H_{13}NO_4S$ (VII), m. p. $164 - 166^{\circ}C$ (from aqueous alcohol). This is dissolved in cold alcoholic solution of the base, and after some hours the Na salt of VII is obtained, $C_{14}H_{12}NNaO_4S$. The solution of the chloride of III and $C_6H_5NHNH_2$ in toluene is boiled for 5 min and phenyl hydrazide of III is obtained, $C_{18}H_{14}N_2O_5S$, m. p. $180 - 182^{\circ}C$ (from alcohol). 10 ml $ClSO_3H$ is poured onto 5.6 g of III

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Sulfur derivatives of dibenzofuran

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dried at 110°C, after 48 hrs (20°C) ice is added, and 5.1 g of IV is filtered off, m. p. 219°C (from toluene). The mixture of 2.5 g of IV, 0.8 g ethanol amine and 150 ml o-xylene is heated for 5 hrs at 100°C, the solvent is decanted from the oily substance which is dissolved in 10% NaOH, acidified with HCl acid, and V is obtained, C₁₆H₁₈N₂O₇S, m. p. 201 - 203°C (from water). [Abstracter's note: Complete translation.]

Card 4/4

STRAKOV, A.Ya.; GUDRINIYETSE, E.Yu. [Gudriniece, E.]; VANAG, G.Ya. [Vanags, G.]

Sulfonation of β -diketones. Part 17: Sulfonation of 2-anisyl-1,3-indandione. Zhur.ob.khim. 32 no.6:1811-1816 Je '62. (MIRA 15:6)

1. Rzhskiy politekhnicheskyy institut.
(Indandione) (Sulfonation)

VANAG, G.Ya. [Vanags, G.], akademik; GUDRINIYETSE, E.Yu. [Gudriniece, E.]
MEYROVITS, I.A.

2-Phenyl-1,3-perinaphthindandione and some of its derivatives.
Dokl. AN SSSR 146 no.1:93-96 S '62. (MIRA 15:9)

1. Rizhskiy politekhnicheskii institut. 1. AN Latvyskoy SSR
(for Vanag).

(Phenalenedione)

GAYLE, I. [Gaile, I.]; GUDRINIYETSE, E. [Gudriniece, E.];
VANAG, G. [Vanāgs, G.], akademik

2'-Amino-5,5-dimethylcyclohexanone-1-(2,3,4',5')-thiazole(1).
Dokl. AN SSSR 146 no.4:817-819 0 '62. (MIRA 15:11)

1. Rīzhskiy politekhnicheskij institut. 2. AN Latvīyskoy
SSR (for Vanag).

(Thiazole)

(Cyclohexanone)

ZIYEMELIS, K. [Ziemelis, K.]; MUTULIS, F.; GUDRINIYETSE, E. [Gudriniece, E.];
VANAG, G. [Vanags, G.], akademik

2-Arylamino-4-phenyl-5-benzoylthiazoles. Dokl. AN SSSR 164
no.1:106-109 S '65. (MIRA 18:9)

1. Rihskiy politekhnicheskij institut. 2. AN Latviyskoy SSR
(for Vanag).

GUDRINIYETS, Y.

GUDRINIECE, J.; DREIMANIS, E.J.; VANAGS, G.J.

2-nitro-perinaphthindandione-1,3 and certain of its derivatives.
Zhur.ob.khim. 26 no.1:272-275 Ja '56. (MLRA 9:5)

1. Latviyskiy gosudarstvennyy universitet.
(Benzonaphthenedione)

GUDRITIS, V.E.

Late-hibernating bears in Eastern Siberia. Zool. zhur. 42
no.6:960-961 '63. (MIRA 16:7)

1. Irkutskiy sel'skokhozyaystvennyy institut.
(Siberia, Eastern—Bears) (Hibernation)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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GUNTS, H. M.
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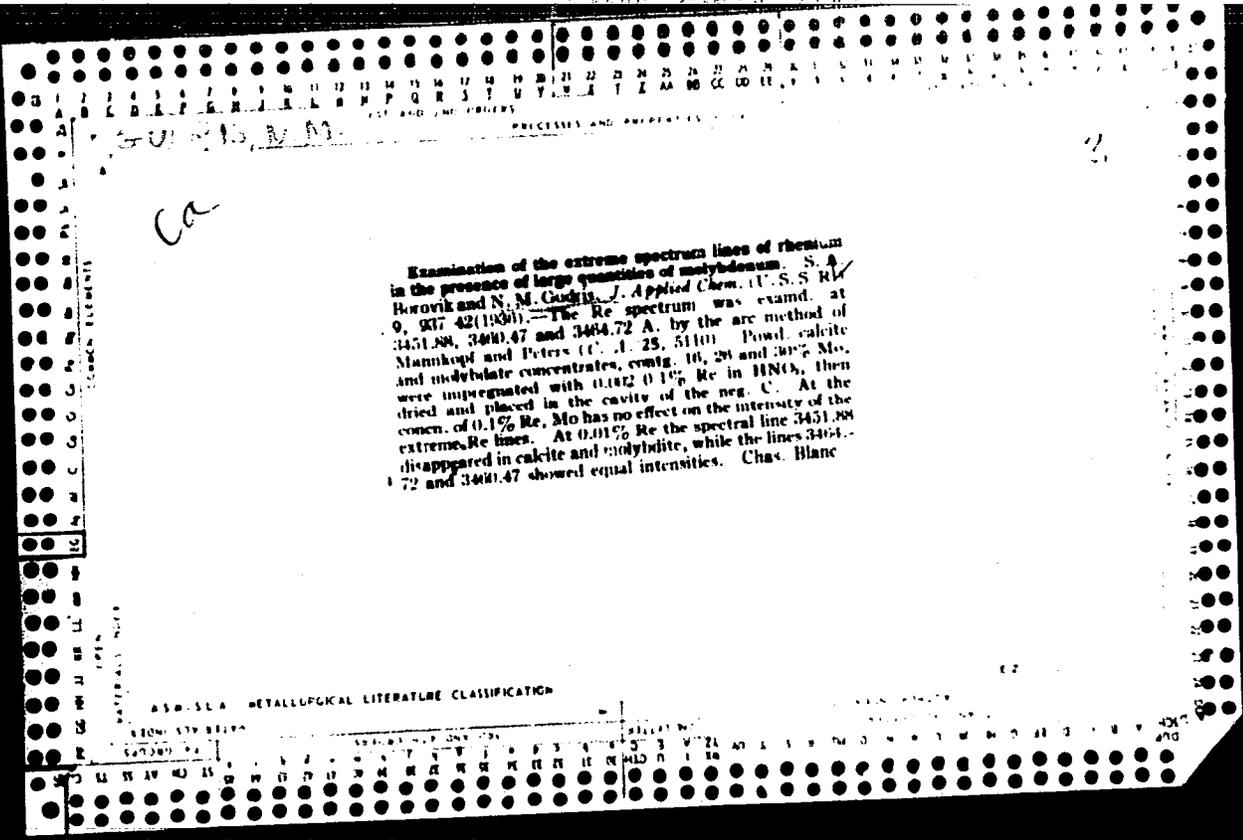
The photoelectric effect from sodium chloride in various gases. N. DUMAIS AND I. KULIKOVA. *J. Russ. Phys.-Chem. Soc., Phys. Pt.* 62, 217-50(1930).--The photoelec effect from dielectrics is highly stimulated by the presence of the vapors with high dielec. constns. in the vicinity of the surface investigated. It seems that the mols. of such gases having a high dipolar moment may disengage ions from the surface of the crystal. When the vapors dissolve the crystal (water vapor) this can also take place in side the lattice, which would also increase the intensity of the photoelec. current. In the other gases the photoelec. effect is similar to that in air. V. VASSILOVSKY

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Gudris, N. M.

51-3-7/14

AUTHORS: Gudris, N. M. and Shul'ts, I. N.

TITLE: Optical Absorption of $PbCl_2$ with a Stoichiometric Excess of Metal or Halogen. (Opticheskoye pogloshcheniye $PbCl_2$ so stekhiometricheskim izbytkom metalla ili galoida.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.246-250. (USSR).

ABSTRACT: Films of lead chloride ($PbCl_2$) were produced by vacuum deposition on a quartz base. These films were not thicker than 0.5μ . Absorption was measured on a spectrophotometer *CQ-4* relative to air, as well as by a differential method using another lead chloride film as a standard. The absorption spectra were measured in the region of the intrinsic absorption band ($\lambda_{max} = 273 \text{ m}\mu$). The lead chloride films were heated in vapours of metals or chlorine (additive coloring). Excess of lead was obtained by one of the following methods: (1) heating in lead vapour in an evacuated vessel; (2) repeated

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51-3-7/14

Optical Absorption of $PbCl_2$ with a Stoichiometric Excess of Metal or Halogen.

sublimation of lead chloride in vacuum; (3) deposition of a metallic layer of pure lead on the lead chloride film and subsequent heating in vacuum. In the absorption spectra of lead chloride films with excess of lead, additional absorption was observed (Fig.1). In Fig.1 curve 1 corresponds to the intrinsic absorption of lead chloride, curves 2 and 3 show absorption of a film heated to 300°C in lead vapours. Wavelengths of new absorption bands of films treated in the ways (1) to (3) are practically identical (Table on p.247). Simultaneously with the appearance of the new bands a decrease of the intensity maximum of the intrinsic absorption occurs in lead chloride with excess of lead. To study the nature of the absorption centres, samples of lead chloride films treated by vapours of mercury, cadmium, tin and sodium were prepared. It was found that the introduction of other metals into lead chloride films produced effects identical with those due to excess of lead. Fig.3 shows that with increase of temperature from 20°C (curve 1) to 100°C (curve 2) and 200°C (curve 3)

Card 2/4

51-3-7/14

Optical Absorption of $PbCl_2$ with a Stoichiometric Excess of Metal
or Halogen.

intensities of the bands due to an excess of metal are decreased but positions of their maxima are not altered. The absorption spectra of lead chloride films with an excess of halogen, prepared by heating in chlorine, were also studied. In this case two new bands with maxima at 279 and 282 $m\mu$ were observed. Again an increase of temperature did not destroy the new absorption bands but simply decreased their intensities. In the absorption spectra of lead chloride films irradiated with X-rays (photochemical coloration) at 20°C all the absorption bands produced by various treatments described above are observed. The bands obtained using X-rays are less stable and an increase of temperature to 200°C destroys them. From the experimental data obtained by them the authors conclude that the absorption centres responsible for the additional bands are of electron and hole type. Further investigations will be necessary to decide finally the nature of these centres. There are 4 figures, 1 table and 3 references, 1 of which is Slavic.

Card 3/4

Optical Absorption of $PbCl_2$ with a Stoichiometric Excess of Metal
or Halogen. 51-3-7/14

ASSOCIATION: Leningrad State Pedagogical Institute imeni A.I. Gertsen.
(Leningradskiy gosudarstvennyy pedagogicheskiy institut
imeni A. I. Gertsena.)

SUBMITTED: January 14, 1957.

AVAILABLE: Library of Congress

Card 4/4

5c

L 24409-66 EWT(1)/EWA(h)/ETC(m)-6 WW

SOURCE CODE: UR/OLJ3/66/000/002/0100/0100

ACC NR: AP6006369

AUTHORS: Chernoval, V. S.; Shcherba, N. U.; Frelin, N. V.; Dashevskiy, L. N.;
Kolyada, I. A.; Gudrit, Ye. B.; Fediv, V. A.; Ivanovskiy, E. N.; Mazur, P. A.;
Yaskevich, L. Ye. 55
13

ORG: none

TITLE: Streamline flow meter. ^v Class 42, No. 178125 [announced by Gas Institute,
AN UkrSSR (Institut gaze AN UkrSSR)]

SOURCE: Izobreteniya, promyshlennyye obrastzy, tovarnyye znaki, no. 2, 1966, 100

TOPIC TAGS: flow meter, streamline flow

ABSTRACT: This Author Certificate presents a streamline flow meter containing a sensing element in the form of a pivoted vane and jet rectifiers mounted in front of and behind the vane (see Fig. 1). To decrease vibrations, the pivoted vane has a bend in the side opposite the flow direction. A plate whose center of gravity is displaced toward the free end of the vane is hinged to the vane. There is also a bypass tube connecting the front and back of the vane.

UDC: 532.574.27 2

Card 1/2

L 24409-66
ACC NR: AP6006369



Fig. 1. 1 - pivoted vane;
2 - bend of vane; 3 - plate;
4 - bypass tube.

Orig. art. has: 1 diagram.

SUB CODE: 14/

SUBM DATE: 12Feb65

Card 2/2 *dd*

GUDRITIS, V.E.

Winter in the Lake Baikal region. Priroda 51 no.12:122 D '62.
(MIRA 15:12)

1. Irkutskiy sel'skokhozyaystvennyy institut.
(Baikal Lake region--Winter)

GUDRYCH, V

10815 Rolling of Thin Sheet From Molten Cupola Iron.
V. Gudrych, Henry Bratcher Translation 2991, 3 pages. (From
~~Sov. Press~~ (Prague), Jan. 10, 1952)
Compares cast iron sheet with steel sheet for cost and resistance
to corrosion. Presents possibilities of paint coating, hot gal-
vanizing, and fire enameling of cast iron sheet.

D
MET

GUDTSEV, I.I., ROMANOV, D.V.

Pine

Pre-planting preparation of ordinary pine seeds by vernalization. Les khoz. no. 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, August 195~~3~~² Uncl.

MODIN, Nikolay Alekseyevich; YEROSHKIN, Aleksandr Nikolayevich;
MEL'NIKOV, Aleksandr Vasil'yevich; GUDTSEV, Richard Ivanovich;
GOLUBEVA, T.M., red.; FREGEN, D.P., red.izd-va; BELUGUROVA, I.A.,
tekhn. red.

[Equipment of small briquet plants for the briquetting of chipped
wood waste] Oborudovanie malogabaritnykh briketnykh stantsii dlia
briketirovaniia izmel'chennykh otkhodov drevesiny. Leningrad,
1961. 29 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy.
Obmen peredovym opytom. Seriya: Derevoobrabatyvaiushchaia pro-
myshlennosti', no.10) (MIRA 15:5)
(Wood-using industries--Equipment and supplies)

PHASE I BOOK EXPLOITATION

SOV/6505

Gavze, M. N. and N. T. Gudraov

Vozdeystviye rtuti kak teplonositelya na stal' v energeticheskikh ustanovkakh (Effect of Heat-Carrying Mercury on Steel in Power Plants). 2d ed., revised and enlarged. Moscow, Izd-vo AN SSSR, 1963. 239 p. 2000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Gosudarstvennyy komitet po chernoy i tsvetnoy metallurgii. Institut metallurgii im. A. A. Baykova.

Resp. Ed.: I. A. Oding, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: Ye. N. Grigor'yev; Tech. Ed.: O. G. Ul'yanova.

PURPOSE: This book is intended for engineers and scientific research workers specializing in the application of liquid-metal heat carriers and the employment of mercury in contact with metals.

Card 1/5

Effect of Heat (Cont.)

SOV/6505

COVERAGE: The book reviews the fields of mercury application as a heat carrier and the problems of the interaction of mercury and its vapors with steel at elevated temperature and pressure. Soviet and non-Soviet works related to this field are systematically surveyed and evaluated. The mechanism of the effect of mercury on steel is analyzed and explained in relation to the selection of steel types suitable for use in a mercury medium. Problems of wetting steel walls with mercury alloyed with surface-active elements are discussed, and data on the interaction of mercury with various metals are presented. No personalities are mentioned. There are 57 references: 40 Soviet, 10 English, and 7 German.

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GUDUKIN, F.D.

From the work experience of veterinarians on the Morshanskiy
State Poultry Farm. Veterinariia 39 no.9:11-14 S '62.
(MIRA 16:10)

1. Glavnyy veterinarnyy vrach sovkhoza "Morshanskiy",
Tambovskoy oblasti.

1. GUDUNOV, S. F.
2. USSR (600)
4. Amputations of Leg
7. Plastic surgery of cutaneous defects of the amputation stump of the hip,
Vest. khir., 72, No. 5, 1952.

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

GUDUSHAURI, Elgudzha Georgiyevich; ABRAMISHVILI, T.A., red.

[Kinematic calculation of five-bar hinged mechanisms]
Kinematicheskii raschet piatizvennykh sharnirnykh me-
khanizmov. Tbilisi, TSodna, 1965. 178 p.
(MIRA 18:7)

GUDUSHAURI, I. I., Engr.

Structural Engineering

Dissertation: "Engineering Method of Calculating the Slabs of a Complex Cross-Section and Its Application to Box-Type Foundations of High Buildings." Cand Tech Sci, Sci Res Inst of Construction Engineering, Academy of Architecture USSR, 19 Mar 54. (Vechernyaya Moskva, Moscow, 9 Mar 54)

SO: SUM 213, 20 Sept 1954

SOV/124-57-7-8277

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 127 (USSR)

AUTHOR: Gudushauri, I. I.

TITLE: On the Investigation of the State of Stress of a Non-rocky Anchoring Medium (K issledovaniyu napryazhennogo sostoyaniya neskaf'noy ankeruyushchey sredy)

PERIODICAL: Izv. Tbilissk. n.-i. in-ta sooruzh. i gidroenerg., 1955, Vol 9 pp 160-169

ABSTRACT: A study is made of the state of stress existing in an unlimited elastic medium subjected to the action of a spherical anchor plate. Consideration is given to the friction existing between the anchoring plate and the medium.

A. M. Kochetkov

Card 1/1

SOV/124-58-3-3323

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 111 (USSR)

AUTHOR: Gudushauri, I. I.

TITLE: Allowance for Reactive Tangential Stresses in the Calculation of a Strip of Finite Rigidity Lying Upon an Elastic Semi-plane (Uchet reaktivnykh kasatel'nykh napryazheniy pri raschete polosy konechnoy zhestkosti na uprugoy poluploskosti)

PERIODICAL: Soobshch. AN GruzSSR, 1957, Vol 18, Nr 1, pp 67-74

ABSTRACT: The problem of flexure of a strip lying on an elastic semi-plane is investigated. The strip and the semiplane are cohesively coupled along the entire line of contact. Normal and tangential stresses along the line of contact are sought in the form of

$$p(x) = \frac{1}{\sqrt{1-x^2}} \sum_{n=0}^{\infty} A_n T_n(x) \quad (1), \quad \text{and} \quad t(x) = \frac{1}{\sqrt{1-x^2}} \sum_{m=0}^{\infty} B_m T_m(x) \quad (2)$$

where x is a nondimensional coordinate and T_k is Chebyshev's polynomial. Conserving in (1) and (2) a finite number of terms the author obtains the necessary number of equations for solving

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SOV/124-58-3-3323

Allowance for Reactive Tangential Stresses (cont.)

the unknowns A_n and B_m from the conditions of equality of flexure and elongation of the beam and the semiplane boundary along the line of contact. A sample problem of a uniformly distributed loading along the strip is calculated. It is determined that adhesion between the bottom of the strip and the surface of the semiplane exerts a considerable limiting influence in diminishing the values of the bending moments and flexures. The influence of the cohesive coupling along the contact surface on the normal reactive stresses increases with the increase in the elasticity of the strip, whereas for rigid strips it becomes practically imperceptible.

V. I. Mossakovskiy

Card 2/2

GUDUSHAURI, I.I.; TSINTSADZE, G.A.

Reinforced concrete plates with zero rigidity. Soob. AN Gruz.SSR 21
no.6:705-712 D '58. (MIRA 12:4)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i
gidroenergetiki. Predstavleno akademikom K.S. Zavriyevym.
(Reinforced concrete)

SOV/179-59-4-10/40

24(6)

AUTHOR:

Gudushauri, I. I. (Tbilisi)

TITLE:

Calculation of the Foundation Strips of Finite Rigidity Under Consideration of Tangential Reaction Stresses

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, 1959, Nr 4, pp 77-84 (USSR)

ABSTRACT:

The solution of the plane problem of cooperation of the foundation strip of any rigidity with the elastic half plane at a complete adhesion of the corresponding points of contact surfaces of the foundation with the substructure (Ref 1) is investigated here. At first, the solution of the problem of contact of the elastic half plane with the foundation strip of any rigidity is put forward. The problem is investigated at a plane deformation. The equation for the bonding of the strip is derived for the case where the ratio between width and length of the strip does not exceed the admissible maximum value of Bernoulli's hypothesis on plane cross sections. The problem consists of the finding of functions which satisfy the conditions of equilibrium and the contact conditions expressed by the formula (1.8). The paper by P. I. Klubin (Ref 3) is

Card 1/2

SOV/179-59-4-10/40

. Calculation of the Foundation Strips of Finite Rigidity Under Consideration
of Tangential Reaction Stresses

taken into account. A special case is investigated in order to be able to study the problem of the quantitative influence of the tangential reaction stresses on the calculated bending moments and the deflection of the strip lying on the elastic half plane. This special case concerns a strip lying on the elastic half plane; the strip is strained by a symmetric transverse load. The agreement with the results obtained by V. A. Florin (Ref 2) is ascertained. There are 4 figures and 3 Soviet references.

SUBMITTED: August 28, 1958

Card 2/2

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

- 68. A. A. Gerasimov, M. M. Mikhlin, A. S. Gerasimov. On a problem of the stability of equilibrium of a hollow shell with respect to elastic displacements.
- 69. G. I. Gerasimov, B. G. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 70. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 71. G. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 72. G. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 73. I. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 74. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 75. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 76. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 77. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 78. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 79. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 80. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 81. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 82. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 83. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 84. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 85. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 86. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 87. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 88. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 89. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 90. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 91. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 92. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 93. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 94. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 95. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 96. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 97. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 98. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 99. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 100. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.
- 101. A. A. Gerasimov. On the stability problem of a hollow shell with respect to elastic displacements.

GUDUSHAURI, Irakliy Iosifovich; DZHIOYEV, Lev Nikolayevich;
FAYERMAN, A.L., red.; BORUNOV, N.I., tekhn. red

[Study of the performance of the foundations of power
transmission line supports in uncemented rock] Issledova-
nie raboty fundamentov opor linii elektroperedachi v neskalk'-
nykh gruntakh. Moskva, Gosenergoizdat, 1963. 151 p.
(MIRA 17:1)

GUDUSHAURI, I.I., kand.tekhn.nauk

New method of calculating arch dams as three-dimensional
systems. Gidr.stroi. 33 no.4:30-32 Ap '63. (MIRA 16:4)
(Dams)

GUDUSHAURI, I.I.

Design of shells by the method of the superposition of fictitious
orthotropic systems. Soob. AN Gruz. SSR 34 no.2:403-410 My '64.
(MIRA 18:2)

1. Tbilisskiy nauchno-issledovatel'skiy institut skoruzheniy i
gidroenergetiki im. A.V. Vintera. Submitted October 14, 1963.

GUDUSHAURI, I.I.

Calculation of arched dam shells by the method of superimposition
of imitation "orthotropic" systems. Soob. AN GruzSSR 37 no.2:379-
386 F '65. (MIRA 18:3)

1. Tbilisskiy institut sooruzheniy gidroenergetiki im. A.V. Vintera.
Submitted May 23, 1964.

GUDUSHAURI, N. I.

Diaphragm for obtaining spectra of a sample at different stages of its burning. Zav.lab. 28 no.7:877-878 '62 (MIRA 15:6)

1. Kavkazskiy institut mineral'nogo syr'ya.
(Spectrum analysis)

Name: GUDUSHAURI, O. N.

Dissertation: Diaphyseal fractures of the lower leg and their treatment

Degree: Cand Med Sci

Affiliation: Min Health USSR, Central Inst of Advanced Training for
Physicians

Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 1, 1957

GUDUSHAURI, O.N., kand. med.nauk

Apparatus for repositioning and fixing fractures of long bones and for lengthening the extremities. Ortop.travm. i protez. 19 no.3: 53-56 My-Je '58 (MIRA 11:?)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N. Priorov).

(FRACTURES, ther.

appar. for reposition & fixation of long bone fract.
(Rus))

(CONTRACTURE, ther.

appar. for lengthening of extremities (Rus))

GUDUSHAURI, O.N.

Treatment of false joints of the leg bones in osteomyelitis.
Ortop. travm. i protez. 21 no. 6876-78 Jz '60. (MIRA 13:12)
(LEG---DISEASES) (PSEUDARTHROSIS) (OSTEOMYELITIS)

GUDUSHAURI, O.N.

Spike osteosynthesis in bone fractures. Khirurgiia no.9:23-
27 '61. (MIRA 15:5)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (dir. -
deystvitel'nyy chlen AMN SSSR prof. N.N. Priorov [deceased])
Ministerstva zdravookhraneniya SSSR.
(INTERNAL FIXATION IN FRACTURES)

GUDUSHAURI, O.N., kand.med.nauk

Compression osteosynthesis in ununited fractures and pseudo-arthroses. Ortop., travm. i protez. no.4:43-47 '62. (MIRA 15:5)

1. Iz Tsentral'nogo instituta travmatologii i ortopedii (i. o. direktora - dotsent V.N. Elokhin).
(FRACTURES) (PSEUDOARTHROSIS)

LUBEGINA, Z.P., kand.med.nauk; SHADIN, M.Ya., kand.med.nauk; GUDUSHAURI,
O.N., kand.med.nauk

The 11th Congress of Orthopedists of the German Democratic
Republic. Ortop., travm. i protez. 24 no.4:92-94 Ap'63.
(MIRA 16:8)

(GERMANY, EAST--ORTHOPEIDIA--CONGRESSES)

MARKOVA, O.N., kand. med. nauk; GHEMISTADOU, S.H., kand. med. nauk

Osteosynthesis in open diaphysial fractures of the leg. Voen.-med. zhurn.
no. 8:32-36 '64. (MIRA 18:5)

GUDUSHAURI, Sh.L.

Changes in the meteorological elements and regime of the Gergeti
Glacier in the Kazbeg glaciation. Trudy Tbil.NIGMI no.9:142-143
1961. (MIRA 15:3)

1. Gidrometeorologicheskaya sluzhba Kazbegi Upravleniya
gidrometeorologicheskoy sluzhby Gruzinskoy SSR.
(Gergeti Glacier)

GUDUSHAUTI, I.I. (Tbilisi)

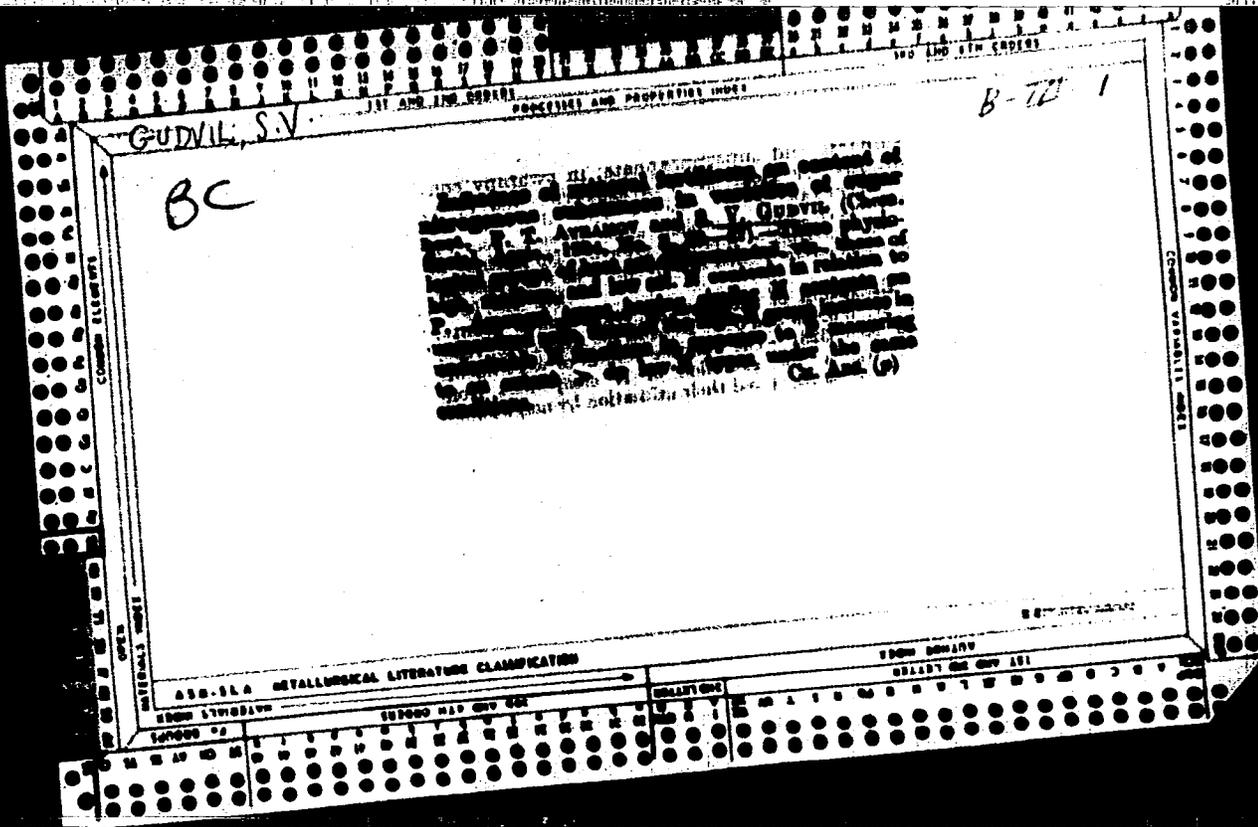
Calculating foundation bars for the action of symmetrical and inverse
symmetrical loads taking into consideration tangential stresses on
the contact surface. Izv. AN SSSR. Otd. tekhn. nauk. *Mekh. i mashinostr.*
no. 5:49-57 S-O '60. (MIRA 13:9)

(Elastic plates and shells)

GUDUSZAURI, O.N.

Treatment of delayed unions and false joints with the aid of compression.
Chir. narz. ruchu ortop. polska 27 no.2:211-216 '62.

1. Z Centralnego Instytutu Traumatologii i Ortopedii w Moskwie.
(FRACTURES UNUNITED ther) (PSEUDOARTHROSIS ther)



GUDVIL', S. V.

20861. Gudvill, S. V. Raboty po selektsii sakharnoy svekly na L'govskoy selektsionnoy stantsii. Sbornik nauch. Rabot (Vsesoyuz. Nauch. -issled. in-T sakh. Svekly.) Kiyev-Khar'kov, 1948, s. 78-85.

SO: LETOPIS ZHURNAL STATEY -Vol. 28, Moskva, 1949.

GUEVIL, S. V.

USSR/Agriculture - Beets, Sugar
Plant Varieties

Mar/Apr 49

"Effect of Time of Planting on Sugar Beet Development," S. V. Gudvil, Laureate of Stalin Prize, Sel Sta, L'vov, 3 pp

"Agrobiol" No 2

Two years of experiments on transplanting sugar beets of L 1650 variety have shown that late planting reduces yield of factory beets, lessens resistance to disease, and increases tendency to flower. To obtain high-grade beet seed, date for planting seed plants should be early in planting period set by agrotechnics for beets

2/5074

KNYAGININA, I.P.; LAPINA, R.A.; BLINOV, V.A.; GUDVILOVICH, I.V.

New "carbozoline" softeners. Tekst.prom.22 no.3:68-69 Mr '62.
(MIRA 15:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley (NIOPiK). (Textile finishing)

L 37638-65 EMT(m)/EPF(c)/EMF(1)/T/ENA(c) Pg-4/Ex-4 RM
S/0062/65/000/002/0370/0371 22
20
B

ACCESSION NR: AP5008115

AUTHOR: Parini, V.P.; Gudvilovich, I.V.

TITLE: Polymers prepared by azo-coupling reactions

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1965, 370-371

TOPIC TAGS: azo coupling, polymer synthesis, tetrazonium salt, phenol derivative, benzidine derivative, toluidine derivative, diazotization, crosslinked polymer, polyphenol

ABSTRACT: An experimental study on the preparation and properties of polymers obtained by coupling tetrazonium salts with components coupling in two or more positions is presented. The study covers ratios of 0.5-2 moles diazo-component per 1 mole of coupling component; benzidine, o-toluidine, benzidine-3,3'-dicarboxylic acid, benzidine-2,2'-disulfonic acid, 4,4'-diaminostilbene-2,2-disulfonic acid; and phenol, o-cresol, sym.-xylenol, 2,3,5-trimethylphenol, resorcinol, 2,4-dihydroxyacetophenone and phloroglucinol. After diazotizing at 0-2C in aqueous HCl with NaNO₂ and coupling in alkaline solution, the polymers were precipitated by acidification, filtered, washed and dried at 100C. Materials obtained from 1:1 component ratios were nearly completely soluble in H₂SO₄ and partly soluble in organic solvents. Molecular weights of the benzene-soluble fractions were 500-1000. Crosslinked insoluble polymers were

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ACCESSION NR: AP5008115

obtained by coupling trifunctional components with an excess of diazonium salt, and a shift of the component ratios in the opposite direction increased the solubility of the polymers. Solubilities were affected by the chemical structure of the components. Polymers showed EPR signals with an intensity 10^{16} - 10^{17} spin/g, formed chelate complexes with metal ions, lost 20-30 wt% on heating to 500C, and were shown to represent polymers of the type of sterically hindered polyphenols.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 18Jun64 ENCL: 00 SUB CODE: OC

NO REF SOV: 001 OTHER: 001

ML
Card 2/2

L 60206-65 EWT(m)/EWP(j) Pe-4 JAJ/CS/RM

ACCESSION NR: AT5019610

UR/0000/64/000/000/0130/0138

AUTHOR: Reykh, V. N.⁴⁴; Ivanova, L. S.⁴⁴; Kovalev, N. F.⁴⁴; Opalev, A. I.⁴⁴; Gudvilovich,
Ye. V.⁴⁴

TITLE: Some properties of SKI-3 synthetic isoprene rubber (S, 44) 32 27 8+1

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka
Polimerizatsiya izoprena kompleksnymi katalizatorami (Polymerization of isoprene by
complex catalysts). Moscow, Izd-vo Khimiya, 1964, 130-138

TOPIC TAGS: polyisoprene, synthetic rubber/ SKI-3 synthetic rubber

ABSTRACT: The effect of ambient conditions on viscosity and basic physical and mechanical properties of SKI-3 synthetic isoprene rubber was studied. Samples of SKI-3 rubber containing 0.25-05 wt. % of DFFA, Neozone, Edgewright-White, and P-20 antioxidants were subjected to thermal (70°C) and light aging for up to 36 months. The effect of rolling on the characteristic rubber viscosity was studied at 0-30 minute rolling duration and at 70°, 120°, and 140°C. For comparison, samples of natural rubber were examined along with the SKI-3 synthetic rubber samples. It was found that thermal and light aging stability of the SKI-3 synthetic rubber matches

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L 60206-65

ACCESSION NR: AT5019610

3

that of the natural rubber. The mechanical and physical properties of SKI-3 rubber samples with a characteristic viscosity of 4.0-5.0 approach the corresponding properties of the natural rubber closer than the low molecular weight polymers with a characteristic viscosity of 2.0-3.0. "T. G. Baskakova, N. G. Titova and A. Ya. Shibayeva took part in the work." Orig. art. has: 8 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 24Oct64

ENCL: 00

SUB CODE: MT

NO REF SOV: 001

OTHER: 001

Card *dm* 2/2

AYZENBERG, B.I.; GULYALIS, L.P. [Gulelis, L.]

Calculation of the selectivity of the protection system of
medium-voltage power distribution networks. Trudy LIEI
no.41:109-114 '62. (MIRA 17:6)

1. Leningradskiy inzhenerno-ekonomicheskoy institut (for Ayzenberg).
2. Institut energetiki i elektrotekhniki An Litovskoy SSR.

(Ukrainian, USSR, (Ukraine, etc.)

Determination of the parameters of networks taking into account
the surface current density of the load. Trudy NII no.41:
150-165 '62. (MIRA 17:6)

1. Institut energetiki i elektotekhniki N Litovskoy SSR.

GUDYALIS, L.M. (Gudyalis, L.M.)

Technical and economic calculation of continuously developing systems. Trudy VNI no.41:207-215 '62. (MIRA 17:6)

1. Institut energetiki i elektrosnabzheniya Litovskoy SSR.

GUDYALIS, L.F.

Calculation of short-circuit current distribution in closed
municipal networks using matrix calculus. Trudy LIEI no. 49:
49-62 '63. (MIRA 17:6)

ANGUSTAYTIS, A.P.; GUDYALIS, L.P.

Calculation of closed municipal power distribution networks
using static d.c. models. Trudy LIEI no. 49:62-68 '63.
(MIRA 17:6)

ACC NR: AR6035237

SOURCE CODE: UR/0372/66/000/008/G028/G028

AUTHOR: Gudyalis, L.; Lashas, A.; Akelis, A.

TITLE: Estimate of tests in the code recognition method

SOURCE: Ref. zh. Kibernetika, Abs. 8G177

REF SOURCE: Sb. Avtomatika i vychisl. tekhn. Vil'nyus, 1965, 15-19

TOPIC TAGS: coding evaluation, pattern recognition, code recognition method

ABSTRACT: In scanning recognition patterns, a code is assigned to each vertical line. The sequence of codes is compared with the reference sequences of all classes of patterns. A block-diagram of the device used with the code recognition method is given. An objective estimate of tests can be expressed in weights for each code x_i . The criterion of evaluation is the amount of information on the presence of pattern y_i as it appears in line k of code x_i

$$I_{x_i \rightarrow y_i} = \log (P(y_i/x_i) / P(y_i))$$

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UDC; 62-506:621.391.193

Card 2/2

L 33747-66 EWT(d)/T/SWP(1) IJP(s) BB:GG/SD/JA:RF)

ACC NR: AT6008568

SOURCE CODE: UR/0000/65/000/000/0192/0194

AUTHOR: Bulovas, V. V.; Gudyalis, L. P.; Lashas, A. V.

ORG: none

TITLE: Coding method for the recognition of visual images 166SOURCE: AN SSSR. Institut nauchnoy informatsii. Chitayushchiye ustroystva (Reading devices). Moscow, VINITI, 1965, 192-194TOPIC TAGS: pattern recognition, character reading equipment, reading machine,
CODING

ABSTRACT: A method for coding a relatively small number of images is described. This method converts an image into pulses of a determined series. Each symbol is scanned in two directions and the vertical line of a series is converted into a code which corresponds to a number and sequence of black and white dots of the image. This code is then compared with the standard code and the resulting coincidence of these codes is displayed at the output as a set of lines. The reliability of this method depends upon the correct selection of statistical codes derived from standard printed symbols and the composition of corresponding matrices representing vertical and horizontal lines. In the example, the data of the code frequency and the matrix composition for the number "5" are given. The test shows that out of 1,000 images, 4 were not correctly recognized and 7 were not recognized at all. It is seen that reliability of this method

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L. 33747-66

ACC NR: AT6008568

is very good; it does not require accurate centering of reading heads, and is simple compared to other methods and therefore can be used with redundant elements which leads to a further increase in reliability. Orig. art. has: 3 figures, 1 table.

SUB CODE: 09/ SUBM DATE: 09Sep65/ ORIG REF: 002/ OTH REF: 001

Card 2/2 *BLG*

KULEMOV, K.K., inzh.; **ZORIN, M.I.**, inzh.-meliorator; **DASHKOVSKAYA, L.T.**, rybovod; **GUDYM, L.M.**; **KONOVALOV, D.N.**, rybovod; **KOTIKOV, A.P.**, inzh.; **ROZHKOV, N.**, red.; **PRIKHOD'KO, S.**, red.; **OLEYNIKOV, A.**, red.; **ZLOBIN, M.**, tekhn. red.

[Fishery resources of Kazakhstan; a manual for fishermen] Rybnye bogatstva Kazakhstana; spravochnik rybaka. Alma-Ata, Kazgosizdat, 1963. 262 p. (MIRA 17:2)

1. Glavnyy spetsialist otdela pishchevoy promyshlennosti Gosudarstvennogo Komiteta Soveta Ministrov Kazakhskoy SSR po koordinatsii nauchnykh i tekhnicheskikh rabot (for Gudym).

GUDYM, Yu.

Conference of stomatologists of the Kabardino-Balkar A.S.S.R.
Zdrav.Ros.Feder. 3 no.2:49 F '59. (MIRA 12:2)

1. Korrespondent zhurnala "Zdravookhraneniye Rossiyskoy Federatsii."
(KABARIDA--STOMATOLOGY)

RIFMAN, L.B.; GUDYM, A.R.; FLAKSMAN, B.Ye.; KAUSH, I.G.

Carbonate-concrete products made of waste products from obtaining
limestone. Stroi.mat. 8 no.10:26-29 0 '62. (MIRA 15:11)
(Limestone) (Concrete products)

KUZNETSOV, M., mayor; SIDOROV, A., podpolkovnik; ORLOV, Yu., gvardii pod-
polkovnik; CHIVENKOV, N., gvardii podpolkovnik; GUDYM, Z., polkovnik;
BRUSILOVSKIY, V., mayor tekhn.sluzhby; YEVSikov, V., podpolkovnik;
PIROZHKOv, V., kapitan; PETROV, N., polkovnik; PETROV, L., kapitan
1 rango; MAMIKON'YAN, A., polkovnik; ZINCHENKO, F., polkovnik;
RODIN, V., podpolkovnik; SVIDERSKIY, V., polkovnik; KOZLOV, V.,
podpolkovnik; YASHIN, S., mayor; OZERKOV, N., podpolkovnik; ZUBKOV,
G., podpolkovnik; ANDRIYANOV, N., podpolkovnik

We discuss projects of new general Army regulations. Voen. vest.
38 no.10:23-35 O '58. (MIRA 11:10)
(Russia--Army--Regulations)

ACC NR: AT6034741

SOURCE CODE: UR/0000/66/000/000/0132/0147

AUTHOR: Gudymenko, B. A.

ORG: none

TITLE: Equations of motion of an elastically deformable body containing a cavity partially filled with an ideal fluid

SOURCE: AN UkrSSR. Slozhnyye sistemy upravleniya (Complex control systems). Kiev, Naukova dumka, 1966, 132-147

TOPIC TAGS: motion equation, elastic body, structure analysis, fluid cavity, differential equation system

ABSTRACT: The problem of automatic control of the flight of a flying device involves the study of its dynamic properties as a controlled plant and the selection of the regulator structure. The problem reduces to investigating a closed system of differential equations which includes the equations of the controlled plant and those of the regulator. The present article examines the first portion of the problem, i.e., the compilation of differential equations for the motion of the object, which is assumed to be elastic and fluid-filled. The literature contains papers on motion of a solid body with a cavity entirely or partially filled with fluid and on several variants of this theme. This paper in a different way derives equations of the motion of an elastically deformable body of arbitrary shape containing a cavity partially

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ACC NR: AT6034741

filled with an ideal fluid. The motion of such a body is described by the finite system of differential equations

$$M[\dot{V}_0 + \omega \times V_0 + \dot{\omega} \times \rho_0 + \omega \times (\omega \times \rho_0)] + \sum \{q_n [\dot{\omega} \times (a^n + b^n) + \omega \times \omega \times (a^n + b^n) - v^n] + 2q_n [\omega \times (a^n + b^n) - \frac{1}{2} v^n] + \bar{q}_n (a^n + b^n)\} + \sum [r_i (\omega \times c^i + \omega \times (\omega \times c^i)) + 2\bar{r}_i \omega \times c^i + \bar{r}_i c^i] = F_0.$$

$$(\Theta_0^i + I_2) \cdot \dot{\omega} + \omega \times (\Theta_0^i + I_2) \cdot \omega + M \rho_0 \times (\dot{V}_0 + \omega \times V_0) + \sum [q_n [2(\Lambda^n \cdot \dot{\omega} + \omega \times \Lambda^n \cdot \omega) + (a^n + b^n) \times (\dot{V}_0 + \omega \times V_0) - \mu^n] + \bar{q}_n [2\Lambda^n \cdot \omega + \omega \times (\Omega^n + G^n) - \mu^n] + \bar{q}_n (G^n + \Omega^n)] + \sum [r_i [c^i \times (\dot{V}_0 + \omega \times V_0) - \mu^i] + \bar{r}_i \omega \times \Omega_i^{(n)} + \bar{r}_i \Omega_i^{(n)}] = m \dot{v}_0.$$

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ACC NR: AT6034741

$$\begin{aligned} & \sum_{\beta} q_{\beta} (\lambda^{\alpha\beta} + K_{\alpha\beta}) - \sum_{\beta} q_{\beta} (2\omega \cdot \Gamma^{\alpha\beta} - r^{\alpha\beta}) + \sum_{\beta} q_{\beta} [c^{\alpha\beta} + \omega \cdot G^{\beta\alpha} + \\ & + (\dot{V}_0 + \omega \times V_0) \cdot a^{\alpha\beta} - \omega \cdot (Q^{\alpha\beta} + B^{\beta\alpha}) \cdot \omega - r^{\beta\alpha}] + \\ & + \sum_i [\Phi_i^{(k)} \bar{r}_i + r_i \omega \cdot (\Pi^{\alpha} \cdot \omega)] + (\dot{V}_0 + \omega \times V_0) \cdot (a^{\alpha} + b^{\alpha}) + \omega \cdot (G^{\alpha} + \Omega^{\alpha}) - \\ & - \omega \cdot (\Lambda^{\alpha} + 3P^{\alpha}) \cdot \omega = Q_{\alpha} \quad (\alpha = 1, 2, \dots). \end{aligned}$$

$$\sum_i \bar{r}_i A_{ik}^{(k)} + j r_k = (J - \dot{V}_0) \cdot R_c^{(k)} - \dot{\omega} \cdot \Omega_c^{(k)} - \sum_{\alpha} q_{\alpha} \Phi_{\alpha c}^{(k)} \quad (k=1, 2, \dots),$$

From this system of equations particular cases may be easily derived, e.g., equations for motion of a solid body without fluid, of a solid body with a cavity entirely filled with fluid, of a solid body with a cavity partially filled with fluid, of an elastically deformable body without fluid, of an elastically deformable body entirely filled with fluid. These equations may be directly used to describe the motion of a flying device of specific type with due regard for elasticity of the body and its fluid filling. Orig. art. has: 45 formulas and 1 figure.

SUB CODE: 20, 12/ -SUBM DATE: 23Feb66/ ORIG REF: 010

Card 3/3

ACC NR: AT6034742

SOURCE CODE: UR/0000/66/000/000/0148/0155

AUTHOR: Gudymenko, B. A.

ORG: none

TITLE: Determining the parameters of motion of a carrier body and deformation in an elastic structure

SOURCE: AN UkrSSR. Slozhnyye sistemy upravleniya (Complex control systems). Kiev, Naukova dumka, 1966, 148-155

TOPIC TAGS: three dimensional motion, elastic structure, information processing, aircraft mechanics, aircraft structure, *motion mechanics*

ABSTRACT: Modern trends in the development of flying devices (increase in flight speed and size) require that elastic deformations of the hull be taken into consideration. This takes on particular significance when a flying object is automatically controlled, since elastic deformations introduce certain distortions into the operation of the control system. In automatic control of the motion of an elastic flying object, as in the stabilization of any controlled system, there must be sufficiently full information on the current position of the system. During the motion of such an object its inertial navigation systems measure the total parameters characterizing flight of the object as a solid body and its elastic deformation. The present article examines the spatial (three-dimensional) motion of a unidimensional object subjected

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ACC NR: AT6034742

to flexion deformation in two planes. The method proposed is based on kinematic relationships of complex motion familiar from theoretical mechanics and on the assumption of deformation of an elastic body by normal forms of free fluctuations. The kinematic parameters in n points and the eigen functions are assumed to be known. The motion of an elastic flying object relative to the inertial system of coordinates $O^*x^*y^*z^*$ is studied. Following A.I. Lur'ye the elastic hull of the flying device is conventionally represented as consisting of a carrier body ("solid skeleton") and the carried bodies, which are the particles of the elastic hull. The author presents the schematic of device for representing the case of motion in plane $O^*x^*y^*$, described by

$$\omega_k = \omega_k(t) + \sum_{i=1}^n q_i(t) \varphi_i'(x_k);$$

$$\dot{\omega}_k = \dot{\omega}_k(t) + \sum_{i=1}^n \dot{q}_i(t) \varphi_i'(x_k);$$

$$V_{xk} = V_{xk}(t) - \omega_k \sum_{i=1}^n q_i(t) \varphi_i(x_k);$$

$$V_{yk} = V_{yk}(t) + \omega_k x_k + \sum_{i=1}^n q_i(t) \varphi_i(x_k);$$

$$W_{xk} = W_{xk}(t) - \omega_k^2 x_k - \omega_k \sum_{i=1}^n q_i(t) \varphi_i(x_k) - 2\omega_k \sum_{i=1}^n \dot{q}_i(t) \varphi_i(x_k);$$

$$W_{yk} = W_{yk}(t) + \dot{\omega}_k x_k - \dot{\omega}_k^2 \sum_{i=1}^n q_i(t) \varphi_i(x_k) + \sum_{i=1}^n \dot{q}_i(t) \varphi_i(x_k).$$

Orig. art. has: 14 formulas and 1 figure.

SUB CODE: 20 01/ SUBM DATE: 23Feb66/ ORIG REF: 007/ OTH REF: 003

Card 2/2

GUDYMENKO, F.S.

Generalization of the Rayleigh-Krylov formula and of the method of
"constant coefficients" and their combined application to approximate
computations of eigenvalues. Nauk.zap.Kiev.un.11 no.7:67-74 '52.
(Differential equations) (Eigenvalues) (MLRA 9:10)

HUDY MENKO, F.S.

76(1)

PHASE I BOOK EXPLOITATION

SOV/2470

Hudyenko, Fedor Sydorovych

Dyferentisial'ni rivnyannya (Differential Equations) [Kyyiv] Vyd-vo Kyivs'kogo derzhavnogo unyv., 1958. 207 p. 5,000 copies printed.

Ed.: O.L. Orlyk; Tech. Ed.: T. I. Khokhanovs'ka .

PURPOSE: This book is approved by the Ministry of Education, Ukr.SSR, as a textbook for physics students at universities.

COVERAGE: The book contains, in adapted form, lectures on differential equations which the author delivered in recent years for students of physics and radio physics faculties of the Kiyev State University imeni T.G. Shevchenko. The author presents the basic theory of ordinary and partial differential equations needed for the solution of fundamental problems connected with theoretical physics; and its applications. The book includes ordinary differential equations of the first order and certain types of higher orders (linear equations and nonlinear equations which can be reduced to linear); simultaneous

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Differential Equations

linear differential equations, and partial differential equations (linear and nonlinear) of the first order. On the basis of the theory presented, concepts of the boundary value problem, and of stability of motion according to Lyapunov are introduced. Geometric interpretations of differential equations are presented and many illustrative examples are given. The author thanks Corresponding Member of the Academy of Sciences, UkrSSR, Yu. D. Sokolov, Academician Y.E. Shtokalo, Professor Ya.B. Lopatyns'kyi, and Docents Yu.B. Blagoveshchenskyi and P.S. Bondarenko for their valuable remarks and advice. References are given in footnotes throughout the book.

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11-19-59

GUDYMENKO, F.S. [Hudymenko, F.S.]; POGREBYSSKIY, I.B. [Pohrebys'kyi, I.B.]; SAKOVICH, G.N. [Sakovych, H.N.]; CHAYKOVSKIY, M.A. [Chaikovs'kyi, M.A.]; SHTOKALO, I.Z., akademik, otv.red.; RAK, L.K., red.-leksikograf; BUNIY, R.O., tekhn.red.

[Russian-Ukrainian mathematics dictionary; 12000 words] Russko-ukrainskii matematicheskii slovar'; 12000 terminov. Izd-vo Akad. nauk USSR, 1960. 162 p. (MIRA 13:7)

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Kyiv, Vyd.Akad.nauk URSR, 1960. 162 p. (MIRA 14:4)

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GUDYMENKO, K. F.

21
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Luminescence and absorption of tin salt solutions. M. G. F. 2
H. Reid and K. F. Gudymenko. *Bull. Acad. Sci. U.S.S.R. Chem. Phys. Ser.* 20, 626-8 (1956) (English translation). — See C.A. 51, 1737a. B. M. R.

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only

Gudymenko, K.F.

USSR / Optics

K

Abs Jour: Referat Zhur-Fizika, 1957, No 4, 10402

Author : Belyy, M.Yu., Gudymenko, K.F.

Inst : Kiev University, Kiev Pedagogical Institute, USSR

Title : Luminescence and Absorption of Solutions of Tin Salts.

Orig Pub: Izv. AN SSSR, ser. fiz., 1956, 20, No 5, 579-582

Abstract: The luminescence spectrum of solutions SnCl_2 in HCl consist of two bands of 470 and 495 millimicrons. Their position is independent of the concentration of the HCl or Sn^{2+} . In aqueous solutions of SnCl_2 one observes luminescence of the same color, but the glow vanishes rapidly owing to hydrolysis. The Sn^{2+} ions become oxidized rapidly in the air into Sn^{4+} ions, which do not luminesce. In the absorption spectrum of the solutions of salts of Sn^{2+} one observes three weakly pronounced maxima, active for luminescence. In the absorption spectrum of solutions of Sn^{4+} the structure is absent. A solution of Sn^{2+} in

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USSR / Optics

K

Abs Jour: Referat Zhur-Fizika, 1957, No 4, 10402

in 18 M H_2SO_4 has a bright luminescence (broadband with two peaks in the regions of 550 and 615 millimicrons). After diluting the solution to 5 M, the luminescence is observed only in the red and infrared regions. The absorption spectra of solutions of Sn^{2+} and Sn^{4+} in H_2SO_4 are analogous to the spectra of their absorption in HCl. The authors propose that the absorption and luminescence are due to the Sn^{2+} ion, whose excited state is triplet (3P).

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SOV/32-24-9-11/53

AUTHORS: Gudymenko, K. F., Belyy, M. U., Skachko, M. A.

TITLE: The Luminescence Method for the Checking of Alkaline Baths for Tinning (Lyuminestsentnyy metod kontrolya shchelochnykh vann luzheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1066-1067 (USSR)

ABSTRACT: The reduction of tin from the tetravalent to the divalent state constitutes one of the main disadvantages of the baths mentioned in the title. Therefore, a speedy, sensitive method for the determination of minimum quantities of divalent tin is of particular importance. Sn^{2+} -ions can luminesce in some solvents, whereas Sn^{4+} -ions do not possess this property. On the basis of this fact, the present method has been evolved. Baths of the following composition were investigated: 10 g/l free base, 6,8 g/l sodium acetate, and 90 g/l sodium stannate. The luminescence was produced by means of ultraviolet light of 200-250 m μ wave length, directed through a quartz lens onto the cuvette containing the solution to be tested. Prior to determination, the test samples taken were diluted with sulfuric acid. A diagram for the automatic control of the checking process is

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SCV/32-24-9-11/53

The Luminescence Method for the Checking of Alkaline Baths for Tinning

given. There are 2 figures and 2 references, which are Soviet.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko
(Kiyev State University imeni T. G. Shevchenko)

Card 2/2

SOV/21-59-7-17/25

3(5)

AUTHOR: Kul's'ka , K.S., Nazarevych, K.S. and Hudymenko, V.F.
(Kul'skaya, O. A., Nazarevich, Ye. S. and Gudymenko, K. F.)

TITLE: Spectral Analysis of Rare-Earth Elements

PERIODICAL: Dopovidi Akademii Nauk Ukrain's'koi RNR, 1959, Nr 7,
pp 769-773 (UkrSSR)

ABSTRACT: A spectrochemical method has been developed for determining rare-earth elements in artificial mixtures conforming to the mean chemical compositions of the sum of the rare-earth oxides or of the cerium group. This method is based on the three-stage method. Zirconium is issued as an internal standard. Photographs are taken on a high dispersion spectrograph. A direct current arc serves as the excitation source. Determination Limits:

Y - 0.01% - 3%	Nd - 0.3% - 3%
La - 0.1% - 3%	Sm - 0.1% - 3%
Dy - 0.1% - 3%	Gd - 0.05% - 3%
Eu - 0.03% - 3%	Er - 0.01% - 1%

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SOV/21-59-7-17/25

Spectral Analysis of Rare-Earth Elements

The error is within limits of $\pm 12\%$. There are 3 tables and 15 references, 6 of which are Soviet, 7 American and 2 German

ASSOCIATION: Instytut heolohichnykh nauk AN URSR (Institute of Geologic Sciences AS UkrSSR)

PRESENTED: V.H. Bondarchuk, Member AS UkrSSR

SUBMITTED: January 6, 1959

Card 2/2

GUDYMT, T. inzh. (Riga)

Electric devices for the Zaporozhets and Moskvich cars. Za rul.
19 no. 11.24-25 N '61. (MIRA 14:12)
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