

(7.1.12) B. L.

137 58-1-1406

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 186 (USSR)

AUTHOR: Golego, N. L.

TITLE: Brass Plating Parts of Aircraft Engines (Latunirovaniye detaley aviatsionnykh dvigateley)

PERIODICAL: Tr. 1-y nauchno.-tekhn. konferentsii. Kiyevsk. in-t grazhd. vozdushn. flota. Moscow, 1956, pp 314-321

ABSTRACT: Friction between two metals may give rise to a metallic bond called seizing (S), which increases the coefficient of friction. Tests were run for S upon the friction of Nr 15 steel with 12KhNZA steel, upon which Cr, Zn, Cu, Ni, Sn, Pb, and In and Sn-Cu, Sn-Pb, or Zn-Cu alloys 120-150 microns thick were plated. The S of steel with a metallic electrolytic coating increases under solid friction, starting at small normal pressures, at the surface (Su) of the specimens, of the order of 5-10 kg/cm². The coefficient of friction of newly-formed Su of the couples studied was in the 0.4-0.75 range, whereas on friction with MS-20 oil it was within the 0.2-0.7 range. The lowest tendency to S was that of a Nr 15 steel-brass couple (the brass being present as a coating). The employment of a Cr coating to prevent S is practi-

Card 1/2

137-58-1-1406

Brass Plating Parts of Aircraft Engines

cable only when the contact-Su pressures are small. The coefficient of solid friction of special oxidized Su when tested for S proved in all cases to be significantly lower than the coefficient of solid friction of newly-formed S.

N. K.

1. Brass plating--Processes

Card 2/2

KOSTETSKIY, B.I., doktor tekhnicheskikh nauk; GILEGO, N.I., kandidat tekhnicheskikh nauk; TOPEKHA, P.K., kandidat tekhnicheskikh nauk.

Chemical analysis of surface layers of metals subjected to various types of wear. Vest.mash. no.10:25-26 O '56. (MLBA 9:11)
(Mechanical wear--Testing)

PHASE I BOOK EXPLOITATION

SOV/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

Iznos i iznosostoykost'. Antifrictionnyye materialy (Wear and Wear Resistance, Antifriction Materials) Moscow, 1960-vo AN SSSR, 1960, 273 p. Erata slip inserted. 3,250 copies printed. (Series: Ita: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Resp. Ed.: M. M. Khrushchov, Professor; Eds. of Publishing House: M. Ya. Klebanov, and S. L. Trak, Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya, Moscow (Institute of Machine Building, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 2-15, 1958. Problems discussed were in 5 main areas: 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairman: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. K. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: S. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairman: B. V. Derysgin, Corresponding Member of the Academy of Sciences USSR, and I. V. Krigezelskiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: V. A. Krasovskiy, Doctor of Technical Sciences); 5) Friction and Friction Materials (Chairman: M. M. Khrushchov, Doctor of Technical Sciences). Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. L. Yu. Fruzhanakiy, Candidate of Technical Sciences, was scientific secretary. The translations of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are: modern developments in the theory and application of antifriction materials; methods for increasing the wear resistance of certain materials; the effects of friction and wear on the structure of materials; the mechanism of the peeling of metal; the effect of various types of lubricating materials on sliding, abrasive wear of a wide variety of materials and composites under many different conditions; modern developments in antifriction materials, and the effects of finish machining on wear resistance. Many personalities are mentioned in the text. References accompany most of the articles.

WEAR AND WEAR RESISTANCE

1. General Problems of the Theory of Wear. Effect of Various Factors on Wear. Increasing wear Resistance.	3
Khrushchov, M. M. Modern Trends in the Development of the Science of Wear Resistance of Materials	
Krasovskiy, B. I., I. G. Krasovskiy, M. M. Polyakova, and P. K. Toporkov. Classification of Metals and Alloys According to Their wear Resistance	15
Krasovskiy, I. V. Wear as a Result of Repeated Detachment of Surface Layers	27
Melikov, I. N. Investigation of the Friction of Chromium Plating in the Absence of Lubrication	35

KOSYETSEIY, Boris Ivanovich; PREYS, G.A., kand.tekhn.nauk, retsenzent;
GOLEGO, N.L., kand.tekhn.nauk, red.; TYNYANIY, G.D., red.

[Wear resistance of machine parts] Soprotivlenie iznashivaniyu
detalei mashin. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1959. 478 p. (MIRA 13:4)
(Mechanical wear) (Machinery)

GOLEGO, Nikolay Lukich; PREYS, G.A., kand. tekhn. nauk, retsenzent; KO-
STETSKII, B.I., doktor tekhn. nauk, prof., red.; CHISTYAKOVA, L.G.,
inzh., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Technological measures for preventing wear of machinery] Tekhnol-
gicheskie meropriiatiia po bor'be s iznosom v mashinakh. Moskva,
G. s. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 191 p.
(MIRA 14:9)

(Mechanical wear)

U.S. PATENT OFFICE
WASHINGTON, D.C. 20540

AUTHORS Kosterikov, E. I., Nosovskiy, I. G., Golov, N. I.; Topolova, E.K.
TITLE Classification of metals and alloys according to their wear resist-
ance
PERIODICAL Referativnyy zhurnal Metallurgiya, no. 1, 1961, 39, abstract TZh256
& 11, 3-y Vestn. Konstruktiv. i inzh. mashinakh T.S.S.R.,
Moscow, Ak. Nauk, 1960, 1-7.

TEXT In order to devise a classification of metals according to character-
istics of their extranility and seizureility, a series of tests have been carried
out on a friction machine KZ-P which makes it possible to conduct tests in
different gaseous media. Specimens of Fe, steel 45, Бр. АМц (Br. AM-c), Бр. АЖМц
(Br. AZM-c), Al, Sn, Б-83 (B-83), Sn, Бр. 0-14 (Br. 0-14), Бр. С-30 (Br. S-30), Bi,
Sb, Cd, Ni, Zn, Mg, and Fe were tested under dry friction in air, O₂, and argon
and subsequently studied by metallography. The friction of specimens was carried
out against a rotating disk from steel 45 at a displacement velocity of the
friction surfaces of 0.5 m/sec and a specific pressure of 10 kg/cm². During one
test the friction force and the temperature were measured at a distance of 0.1 mm

Card 1/2

Classification of metals and alloys...

U.S. Doc. 000/000/000/072
000/000

from the friction surface, and the reduced wear of the specimens in weight and volume was determined. Under the metallographic study of the friction surface was studied and the microhardness determined. A scheme for classifying materials according to their wear-resistance under friction and taking into account their seizureability and oxidizability is worked out, according to which all metals and alloys are divided into 4 groups. The first group includes Fe, Ni, and some of their alloys, and also W, which, although it shows a seizureability of both kind I and kind II, under conditions of oxidizing friction forms protective oxide films which show good wear resistance due to a stable bond to the base metal and possess a high hardness. The second group includes Ti and alloys not prone to seizing and which form protective oxide films with high wear resistance under oxidizing friction. Sn and its alloys and a whole series of anti-friction metals and alloys belong to this group. The third group includes metals (Co, Pt, Pd) which do not demonstrate seizureability and under oxidizing friction form very fragile oxide films, which raise sharply the wear rate. The fourth group includes metals (Zn, Mg) which possess seizureability and under conditions of oxidizing friction form easily disintegrating oxide films which also increase the wear rate.

... (continued)

[Abstracter's note - complete translation.]

Card 3/2

PHASE I BOOK EXPLOITATION

SOV/5821

Golego, Nikolay Lukich

Tekhnologicheskiye meropriyatiya po bor'be s iznosom v mashinakh
(Measures for Combating Wear in Machinery) Moscow, Mashgiz,
1961. 191 p. 13,00 copies printed.

Reviewer: G. A. Preys, Candidate of Technical Sciences; Ed. : B. I.
Kostetskiy, Doctor of Technical Sciences, Professor; Ed. : L. G.
Chistyakova, Engineer; Tech. Ed. : M. S. Gornostaypol'skaya; Chief
Ed. (Southern Dept. Mashgiz): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for engineers and technicians concerned
with the design, manufacture, operation, and repair of machinery.

COVERAGE: Results are given of original investigations carried out to
show the most frequently encountered wear processes resulting from
types 1 and 2 galling [galling at low and high temperatures respectively.]

Card 1/5

S/019/61/000/015/080/101
A154/A126

AUTHOR: Golego, N.L.

TITLE: A method for preventing seizing and corrosive fretting of steel surfaces

PERIODICAL: Byulleten' izobreteniy, no. 15, 1961, 55

TEXT: Class 48a, 1. No. 140295 (662983/22 or April 14, 1960). A method of preventing seizing and corrosive fretting of steel surfaces rubbing against each other or contacting each other in threaded, splined, key and other joints by electroplating them, distinguished by the fact that, in order to improve their anti-seizing properties and reliability in operation, the plating metal used is cobalt, of which a layer, 12 - 15 μ thick for example, is applied to one or both contacting surfaces.

Card 1/1

20199

1 JULY 1957

SECRET

... of the wire fastener and its development
... of the wire fastener and its development

... Laboratory ... 1957 ... 101-334

... The latter started processes at angles of the first and second
... the use of parts which are not said other. Two
... means of a 4E-3 (114-3) machine. In the
... specimens
... cylindrical
... constant
... friction, and a load
... by weighing.
... It was found
... velocity 10.06
... (11.44 m. sec).
... specimen size

... :

30179

AP

1971-01-017-003/019/025
1971-01-01

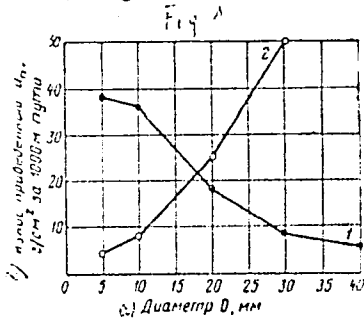
In the course of the study of the effect of the direction of the
 force applied to the specimen on the results of the study, the author studied
 the effect of the direction of the force applied to the specimen with a change in
 the diameter of the specimen from 1.0 mm to 1.5 mm and a = 30 mm,
 with a constant rate of displacement of the specimen of 0.05 mm under
 the action of a force of 10 N. The results of the study in the zones
 of the specimen with a diameter of 1.0 mm and a rate of displacement of 0.001-0.5 mm/sec
 are presented in the figure. It is seen that the results of the study become weaker
 with an increase in the diameter of the specimen. In addition, there occurs only
 one zone of maximum deformation of the specimen with increasing
 diameter of the specimen. The results of the study of the first and second
 zones of the specimen with a diameter of 1.0 mm are presented in the specimen
 figure. The effect of the rate factor is practically based on temperature
 changes. In the case of the first zone, with the temperature of the speci-
 men increasing, the amount of the deformation increases. Along the ad-
 direction of the force applied to the specimen, the material is softened
 and the results of the study are weakened. Besides,
 the results of the study of the specimen at the various temperatures
 of the specimen are higher than those of the main specimens. To
 Cont. 2/4

20199

Effect of the size factor...

S/032/61/027/003/019/025
B101/3203

reduce the abrasion of machine parts (i.e., to eliminate the possibility of adhesion of the first type) rubbing against each other at low velocity and high specific pressure in a dry or half-dry state, it should be attempted to reduce the heat liberation from surfaces by enlarging the rubbing surfaces and changing the size of machine parts. In machine parts rubbing against each other at high velocity, adhesion of the second type can be prevented by keeping the rubbing surfaces small and the surface temperature low. B. I. Kosteletskiy and G. I. Zaletskiy are mentioned. There are 3 figures and 2 Soviet-bloc references.



Legend to Fig. 1:
Abrasion of steel specimens at 50 kg/cm². 1) 0.06 m/sec; 2) 3.44 m/sec; a) diameter D, mm, b) reduced abrasion \bar{U}_n , g/cm² per 1,000 m distance.

Card 3/4

S/385/62/000/000/020/020
E104/E155

AUTHORS: Kostetskiy, B.I., Gologo, N.I., and Bogomolov, N.I.
TITLE: A procedure, an instrument and equipment for studies of the strength of surface layers
SOURCE: Metody ispytaniya na iznashivaniye; trudy soveshchaniya, sostoyavshegosya 7-10 dek. 1960. Ed. by N.M. Khrushchov. Moscow, Izd-vo AN SSSR, 1962. 212-219
TEXT: In order to develop the theory of surface strength and to solve fundamental problems of friction and wear, quantitative data are required about deformation of surface layers of solids in contact with one another. Direct methods of determining these mechanical properties in the presence of normal and tangential stresses have not yet been developed, but various indirect procedures exist. An instrument is described for studying the strength and deformation of surface layers of metal in motionless contact. A ring specimen, 39 mm o.d., 53 mm i.d., 10 mm high, with its upper edge serrated, is pressed by a hardened punch against a hardened block. Strain is measured by a pneumometric head. This is a very sensitive arrangement and a strain of a few
Card 1/3

A procedure, an instrument and ...

S/385/62/000/000/020/020

E194/E155

tenths of a micron can be measured. Strain of the specimen and the contact area can be determined as function of load. The construction is described with diagrams. Equipment is described for studying the mechanical properties of surfaces sliding at low speeds whilst subject to normal and tangential forces. Such sliding can cause strain of the surface layers, work-hardening or surface damage. These effects depend on the size and nature of the applied forces, and a machine was required with a constant area of contact with a wide range of load. The upper rotating specimen is a thick disc, whilst the lower stationary specimen is a similar disc with surface serrations; the contact area between the specimens can range from 0.5 to 5 cm². Load can be applied up to a value which causes flow of the surface layers of the test pieces. At the start of test the normal load is zero for a given value and is raised to a preset programme. The increase in load corresponds to the linear displacement of the friction surfaces. The normal loading is recorded by an oscillograph and strain gauges. An important part of the machine is the mechanism for measuring tangential forces in friction. A flat spring

Card 2/3

A procedure, an instrument and ...

S/883/62/000/000/020/020
E194/E155

dynamometer ensured the necessary sensitivity yet withstood high loading. The commencement of mechanical processes on the friction surfaces, their development and transition to seizure, work-hardening and damage to the contact surfaces are observed. Tested specimens have been sectioned and their microstructure examined, and typical photomicrographs are shown. Curves are plotted of microhardness as function of load with stationary and rotating specimens, and it appears that the hardening process is more intensive in a moving contact. There are 10 figures.

Card 3/3

S/O19/62/000/003/056/085
A154/A126

AUTHORS: Lerner, M.Ye.; Golego, N.L.; Galushko, A.B.; Shityagin, A.N.

TITLE: An alkaline electrolyte for electrolytic tinning

PERIODICAL: Byulleten' izobreteniy, no. 3, 1962, 50

TEXT: Class 43a, 600. No. 144683 (725490/22-2 of April 6, 1961). An alkaline electrolyte for electrolytic tinning, containing stannous chloride and sodium pyrophosphate, distinguished by the fact that, in order to improve the quality of the tinning, it also contains the surface-active material trilon-B (trilon-B) and joiner's glue, the electrolyte components being taken in the following proportion: stannous chloride 60 g/l; sodium pyrophosphate 200 g/l; trilon-B 25 g/l; joiner's glue 3 g/l.

Card 1/1

S/019/62/000/004/086/108
A152/A126

AUTHOR Gollego, N. L.
TITLE Alkaline bath for electrolytic cobalt plating
PERIODICAL Byulleten' izobreteniy, no. 4, 1962, 62
TEXT Class 48a, 6⁰⁸. No. 145100 (661673/22 of April 1, 1960) An alkaline bath for electrolytic cobalt plating, differing from others in that in order to obtain elastic, well polishable and strongly cohesive deposits, it contains (in g/l) cobalt hydroxide about 10.0, Trilon B 64.0, potassium hydroxide 140.0 and may also contain up to 10 g/l of joiner's glue.

Card 1/1

FRYS, G. G. Administrative PROBAC, M.I., prof., invention:
MOSKVA, M.I.S.S., 1963.

[Increasing the wear resistance of the parts of the equip-
ment of the food industry enterprises] Fourshane iznos-
otivnost metall svetovoi predpriyatii prilozhenii
promyshlennosti. Moskva, Machin, 1963. M.I.

(M.I.S.S. 1963)

GOLEGO, N.L.

Testing machines for investigating the processes of friction
and wear at high speeds of slip. Zav. lab. 29 no.6:761-763
'63. (MIRA 16:6)

1. Kiyevskiy institut grazhdanskogo vozdušnogo flota.
(Testing machines) (Mechanical wear)

L 39989-65 EPF(c)/EWT(m)/EWP(b)/EWA(a)/EWP(w)/EWP(t) P.L./Pat YJP(c) DJ/
ACCESSION NR: AT4049820 JD/HW/GS S/0000/64/000/000/0138/0148

AUTHOR: Golego, N. L.

40
30
BTI

TITLE: Protective coatings of parts working under conditions of metal binding

SOURCE: Soveshchaniye po uprochneniyu detaley mashin, 1962. Protzassy uprochneniya detaley mashin (Processes of the hardening of machine parts); doklady soveshchaniya. Moscow, Izd-vo Nauka, 1964, 138-143

TOPIC TAGS: metal binding, metal friction, friction binding, binding prevention, binding wear, protective coating

ABSTRACT: One of the most dangerous and destructive forms of wear is that due to metal binding. Many modern machines work in high vacuums, in neutral media, without fluid lubricants and at either high or low temperatures. Under these conditions binding is intensified, arising not only with sliding friction but also with rolling friction. Investigations of machine parts and laboratory samples have demonstrated that there is a two-fold mechanism of binding. First of all, binding may be considered as the formation of a metallic bond between two adjoining metal surfaces. Secondly, metal binding largely depends on the strength and the conditions for formation and destruction of protective films having a secondary structure at the contact surfaces of metals and alloys.

Card 1/3

L 39989-65

ACCESSION NR: AT4049820

6

Investigations begun by the author in 1961 indicate that binding arises under two different types of working conditions and leads to two different forms of wear. The first type arises at low sliding friction velocities, high specific pressures and at insignificantly increased temperatures. The second type is found at high sliding friction velocities, high specific pressures and high temperatures. The main methods of combatting the first type of binding are selection of metals, design of protective non-metallic films and special secondary structures by diffusion, and increasing hardness or lowering plasticity. The second type is eliminated by increasing the heat resistance of metals, lowering friction by special lubricants and lowering the temperature in the rubbing metals. The selection of optimal specific pressures and velocities is of great importance. Electrolytic coatings are widely used. Different metals and alloys have different capacities for binding. According to their classifications, metals and alloys are available which do not bind, including bismuth, antimony, cobalt, brass and others. Electrolytic bismuth, antimony, cobalt and brass under low friction and low velocities with high specific loads eliminate binding of the first type, as does electrolytic sulfide. Testing of samples with the friction surfaces hardened by carbon and oxygen resulted in the complete elimination of binding under all loads. At present, completely worked out

Card 2/3

L 39989-65

ACCESSION NR: AT4049820

methods are available for eliminating the first type of binding by electrolytic antimony, bismuth, cobalt, brass and sulfide, as well as by hardening with carbon and oxygen. 4
Orig. art. has: 4 figures. 27

ASSOCIATION: none

SUBMITTED: 21May64

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 000

Card 3/3 MB

ACCESSION NR: AP4037198

S/0125/64/000/005/0015/0017

AUTHOR: Golego, N. L. (Doctor of technical sciences)

TITLE: Investigation of the fine structure of metals in connection with the process of coalescence

SOURCE: Avtomaticheskaya svarka, no. 5, 1964, 15-17

TOPIC TAGS: metal, metal fine structure, metal bonding, metal coalescence, metal submicrostructure, iron submicrostructure, cold welding

ABSTRACT: Results of a study of the initial fine structure, plastic deformation, and coalescence (bonding) of commercially pure iron are reported; x-ray diffraction analysis, optical and electron-microscope methods were used. The microstructure of three groups of grain of the source metal is shown. Coalescence of metal was produced on a special cold-welding outfit where a pressure of 100 kg/cm^2 and a relative motion at 0.5 cm/sec were applied. For

Card 1/2

ACCESSION NR: AP4037198

purposes of analysis, each "node of coalescence" is divided into 3 zones; pictures of the microstructure in each zone are presented. It is found that the quality of cold welding "is proportional to the degree of plastic deformation in the surface layers of metal, at the point of coalescence." Orig. art. has: 5 figures.

ASSOCIATION: Kievskiy institut grazhdanskogo vozdušnogo flota (Kiev Institute of Civil Aviation)

SUBMITTED: 25Jan64

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 007

OTHER: 000

Card 2/2

GOLEGO, N.L.

Surface active media as affecting the development of metal
setting process during friction. Dokl. AN SSSR 154 no.4:
897-898 F '64. (MIRA 17:3)

1. Predstavleno akademikom P.A. Rebinderom.

L 34950-65 EWT(1)/EWT(m)/ENP(w)/EWA(d)/EPR/T/ENP(t)/ENP(b) LJP(c) ID/IG

ACCESSION NR: AP5007348

S/0125/65/000/003/0018/0000

AUTHOR: Golego, N. L. (Doctor of technical sciences)

TITLE: Seizing of metals in a high vacuum

SOURCE: Avtomaticheskaya svarka, no. 3, 1965, 18-20

TOPIC TAGS: pure metal, pure metal seizing, similar metal seizing, dissimilar metal seizing, friction coefficient

ABSTRACT: The seizing of pure similar and dissimilar metals in a vacuum of 10^{-9} to 10^{-10} mm Hg has been investigated at room temperature at a rate of the relative motion of the contacting surfaces of 1 mm/sec or under static compression. Thirty pure metals, representing all groups of the periodic table of elements, were tested under a stress of 5% of the tensile strength of the tested metal. It was found that with friction under conditions of high vacuum, all similar metals were susceptible to seizing. The friction coefficient for dissimilar metals varied from 0.8 to 6.5 and depended on the mechanical strength of the metals and the load and intensity of seizing. The mutual solubility of metals has no effect on the initiation and development of the process of seizing. For example, iron-chromium, iron-aluminum, and iron-titanium pairs (the room temperature solubility of Cr, Al and Ti in Fe is 100,

Card 1/2

L 34950-65

ACCESSION NR: AP5007348

32, and 3%, respectively) experienced seizing with friction. However, no seizing was observed in iron-antimony and iron-zirconium pairs, although both metals are soluble in iron (antimony 7%, zirconium 0.15%). Iron-scandium and iron-magnesium pairs (neither scandium nor magnesium is soluble in iron) experienced no seizing, but two other pairs with mutually insoluble components, iron-silver and copper-molybdenum, experienced a partial seizing. The difference in the crystal lattice structure of the metals also has no effect on seizing. Only differences in atomic diameters were found to have a considerable effect. An intensive seizing was observed between metals with atomic diameters differing by 15--18%, but no seizing occurred when the difference was larger than 15--18%. In the experiments with very smooth and clean, vacuum-deposited pure metal films, the seizing occurred over 35--40% of the contact area under very low static pressures (up to $1\text{g}/\text{cm}^2$). Orig. art. has: 6 figures. (MS)

ASSOCIATION: Kiyevskiy institut grazhdanskoy aviatsii (Kiev Institute of Civil Aviation)

SUBMITTED: 25Jan64

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3214

Card 2/2

ACC NR: AM6014727

(A) Monograph

UR/

Golego, Nikolay Lukich

Seizing in machines and methods of its elimination (Skhvatyvaniye v mashinakh i metody yego ustraneniya) [Kiev] Izd-vo "Tekhnika," [1965] 230 p. illus., biblio. 2200 copies printed.

TOPIC TAGS: metal friction, wear resistance, metal stress, metal seizure, mechanical stress

PURPOSE AND COVERAGE: This book is intended for engineers studying the process of metal friction, seizure, and wear. Seizure of machine parts under different conditions and the effect of friction leading to metal wear, fatigue, and failure are reviewed and the mechanism of seizing are analyzed. At the same time, the possibility of successfully using metal seizure for cold welding is stressed. The nature, mechanism and development of metal seizing processes and of their control are described.

TABLE OF CONTENTS:

Introduction -- 5

Card 1/5

UDC: 621.891

ACC NR: AM6014727

- Ch. 1. Methods, Machines and Units for Investigation of Seizing of Metals Under Friction -- 7
1. Selecting of investigation methods -- 7
 2. Principal methods of investigation -- 9
 - Analysis of the structure of metal surfaces under friction and of surface layers -- 9
 - Investigation of chemical composition of metal surface layers by spectral method -- 13
 - Investigation of microhardness of surfaces under friction and of metal surface layers -- 14
 - Investigation of microgeometry of surfaces under friction -- 15
 - Measuring temperatures in metal surface layers under friction -- 15
 - Measuring of normal and tangential force in friction -- 17
 - Records of machine parts -- 18
 - Determination of most important types of wear of machine parts on the basis of external signs -- 20
 - Complex method of investigating quantitative and qualitative characteristics of friction processes and of wear under conditions of metal seizure -- 21
 3. Machines and Units -- 23
 - Machine for investigation of seizing of metals in friction under conditions of low sliding rates -- 24

Card 2/5

ACC NR: AM6014727

Machine for investigation of seizing of metals in friction under conditions of high sliding rates -- 27

Machine for investigation of seizing of metals in friction under condition of superhigh sliding rates -- 29

Machine and units for investigation of seizing of metals in friction under vibration conditions -- 30

Unit for investigation of seizing of metals in friction under conditions of low temperatures -- 33

Unit for investigation of seizing of metals in friction under conditions of high temperatures -- 35

Unit for investigating the mechanism of seizing of metals under friction -- 37

Unit for investigation of seizing of metals under friction in high vacuum -- 38

Ch. 2. Investigation of Seizing of Metals in Friction of Machine Parts -- 42

1. Seizing of metals under friction -- 42
 - Seizing of the first type -- 48
 - Seizing of the second type -- 53

Ch. 3. Experimental Investigation of Seizing of Metals Under Friction -- 60

Card. 3/5

ACC NR: AM6014727

1. Effect of external mechanical factors on the law governing the development of seizure of metals under friction -- 61
Effect of sliding rate, pressure and vibration on the development of seizing processes -- 61
Effect of temperature on the development of the seizing process -- 101
Effect of the seize of contacting parts on the development of seizing processes -- 122
Effect of the machine work duration on the beginning and development of the seizing of metal -- 131
2. Effect of gas, liquid and solid lubricants on the development of seizing of metals under friction -- 134
Role of gas and liquid media on the process of friction and wear -- 134
Effect of solid lubricants on the development of processes of seizing -- 163
3. Effect of materials and methods of treatment on the development of seizing of metals under friction -- 166
Classification of metals and alloys based on their wear resistance -- 168
Susceptibility of pure metals to seizing under conditions of high vacuum -- 194
Effect of oxide films on the development of seizing of metals -- 198

Card 4/5

ACC NR: AM6014727

- Change in structure of iron in the zone of seizing -- 203
4. Kinetics of the beginning and development of processes of
seizing of metals under friction -- 214

References -- 221

SUB CODE: 13/ SUBM DATE: 10Dec65/ ORIG REF: 124/ OTH REF: 025

Card 5/5

GOLEJ, M., ZAPUNOW, B.

"Electricity Plants", by M. Golej, B. Zapunow. Reported in New Books
(Nowe Książki), No. 11, July 15, 1955

1

W. J. ...

... ..

GMFA, Adam, Inc., P.P.H. Jozef

Comparability coefficients of necessary data in 1980-1982
nonferrous metals Study 2 metals 10 no 3:139-144 15 85

P/034/61/000/009/001/004
D247/D302

AUTHOR: Gołek, Jan, Engineer

TITLE: Automatic control of electrodes in an arc furnace
by means of an asynchronous motor controlled by a
magnetic amplifier

PERIODICAL: Pomiary, Automatyka, Kontrola, no. 9, 1961, 355-359

TEXT: The author describes prototype control equipment for controlling the position of electrodes in arc furnaces. Comparison is made between the performance of amplydyne control and the new one. A simplified diagram of the circuit is shown. The first stage has 100% feedback. The cases are made of silicon steel cold rolled. Its characteristics are shown as well as the characteristic curves for amplifiers. The second stage of amplification is the saturable reactor. The final control element is an asynchronous motor with additional resistance in the rotor or squirrel cage motor. The system is controlled by means of signals sensitive to changes in the arc current phase voltage. The voltage signal is fed to the balan-

Card 1/3

Automatic control of electrodes...

P/034/61/000/009/001/000
D247/D302

cing transformer, the bridge rectifier and the control winding of the first stage amplifier. The current impulse from the electrode is fed to the current circuit. The system has a proportional type of control. Additional feedback loop gives the required damping. There is also provision for manual control. The system in the first place was tested with a simulated control signal, i.e. from a potentiometer attached to motor shaft. Finally the system was calibrated. Time constant was about .8 sec. At this stage the system was compared with an existing control system as made by the English firm B.T.H. The behavior of the control system during starting and extinguishing of the furnace is illustrated. The author says that this performance is not very representative of the system for two reasons. The type of motor was too weak (the system can drive the electrode 100 mm/sec as compared with 25-30 mm/sec for the amplidyne system) and the damping was operating all the time. In the industrial version of the system starting and extinguishing will be automatic. The sensitivity of the system is the same as that of the amplidyne, but this system can deliver 10 times as much power. The

Card 2/3

Automatic control of electrodes...

P/034/61/000/009/001/004
D247/D302

system is simple in operation and requires very little servicing. There are 19 figures and 14 references: 12 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: P.L. Alger, Speed Control of Conduction Motors Using Saturable Reactions, Electrical Engineering No. 2, 1957.

ASSOCIATION: Instytut metalurgii zelaza Gliwice (Institute of Steel Metallurgy, Gliwice)

Card 3/3

17/03/61 14:15/1-01-1
R55/A11

AUTHOR. Golek, J.

TITLE. Automatic electrode regulator in an arc furnace with asynchronous motors controlled by a magnetic amplifier

PERIODICAL. Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 38, abstract 2722
("Automatizace", 1961, v. 4, no. 9, 261-265, Czechoslovakian; -
Russian, German, English and French summaries)

TEXT. The author describes the scheme and the operational principle of an automatic electrode regulator prototype. Results of comparative investigations are given which had been performed after the mounting of the new regulator on an arc furnace with amplidyne control of the electrode position; corresponding

J. Kashayeva

[Abstracter's note: Complete translation]

Card 1/1

GOLEK, J.

Phenomena in ice on rivers in Poland, p. 11. (GAZETA OBSERWATORA, I...R.M., Warszawa, Vol. 8, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4, No. 1, Jan. 1955, Uncl.

GOLEK, JULIAN.

GEOGRAPHY & GEOLOGY

GOLEK,

GOLEK, JULIAN. Zjawiska lodowe na rzekach polskich. Warszawa, Wydawn.
Komunikacyjne, 1957. 58 p. (Warsaw. Panstwowy Instytut Hydrologiczno-
Meteorologiczny. Prace, zesz. 48)

Monthly List of East European Acquisitions (EEAI) 10. Vol. 8, No. 5,
May 1959, Unclass.

1957, 4.

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1959, 10: 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 10-8, 10-9, 10-10, 10-11, 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20, 10-21, 10-22, 10-23, 10-24, 10-25, 10-26, 10-27, 10-28, 10-29, 10-30, 10-31, 10-32, 10-33, 10-34, 10-35, 10-36, 10-37, 10-38, 10-39, 10-40, 10-41, 10-42, 10-43, 10-44, 10-45, 10-46, 10-47, 10-48, 10-49, 10-50, 10-51, 10-52, 10-53, 10-54, 10-55, 10-56, 10-57, 10-58, 10-59, 10-60, 10-61, 10-62, 10-63, 10-64, 10-65, 10-66, 10-67, 10-68, 10-69, 10-70, 10-71, 10-72, 10-73, 10-74, 10-75, 10-76, 10-77, 10-78, 10-79, 10-80, 10-81, 10-82, 10-83, 10-84, 10-85, 10-86, 10-87, 10-88, 10-89, 10-90, 10-91, 10-92, 10-93, 10-94, 10-95, 10-96, 10-97, 10-98, 10-99, 10-100.

1960, 1: 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-19, 1-20, 1-21, 1-22, 1-23, 1-24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-30, 1-31, 1-32, 1-33, 1-34, 1-35, 1-36, 1-37, 1-38, 1-39, 1-40, 1-41, 1-42, 1-43, 1-44, 1-45, 1-46, 1-47, 1-48, 1-49, 1-50, 1-51, 1-52, 1-53, 1-54, 1-55, 1-56, 1-57, 1-58, 1-59, 1-60, 1-61, 1-62, 1-63, 1-64, 1-65, 1-66, 1-67, 1-68, 1-69, 1-70, 1-71, 1-72, 1-73, 1-74, 1-75, 1-76, 1-77, 1-78, 1-79, 1-80, 1-81, 1-82, 1-83, 1-84, 1-85, 1-86, 1-87, 1-88, 1-89, 1-90, 1-91, 1-92, 1-93, 1-94, 1-95, 1-96, 1-97, 1-98, 1-99, 1-100.

1961, 1: 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-19, 1-20, 1-21, 1-22, 1-23, 1-24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-30, 1-31, 1-32, 1-33, 1-34, 1-35, 1-36, 1-37, 1-38, 1-39, 1-40, 1-41, 1-42, 1-43, 1-44, 1-45, 1-46, 1-47, 1-48, 1-49, 1-50, 1-51, 1-52, 1-53, 1-54, 1-55, 1-56, 1-57, 1-58, 1-59, 1-60, 1-61, 1-62, 1-63, 1-64, 1-65, 1-66, 1-67, 1-68, 1-69, 1-70, 1-71, 1-72, 1-73, 1-74, 1-75, 1-76, 1-77, 1-78, 1-79, 1-80, 1-81, 1-82, 1-83, 1-84, 1-85, 1-86, 1-87, 1-88, 1-89, 1-90, 1-91, 1-92, 1-93, 1-94, 1-95, 1-96, 1-97, 1-98, 1-99, 1-100.

GOLSEK, J.

Remarks on the thermal conditions of Polish rivers. p. 87.

OGOSPODARSTWA WODNA. (Naczelna Organizacja Techniczna) Warszawa, Poland.
Vol. 19, no. 2, Feb. 1959.

Monthly list of East European Accessions Index, (EEAI), LC, Vol. 3, no. 6,
June 1959
uncla.

TOMALA Wygmont iad: 30000 Jan. 1960.

An electric gun packet controlled by magnetic amplifiers.
Wiadom gosp 19 no. 11: 359-360 N 1960.

ACC NR: AP6036807

SOURCE CODE: PO/0039/66/C00/011/0466/0473

AUTHOR: Goczal, Jan (Master engineer); Colek, Jan (Master engineer); Lasota, Julian (Master engineer)

ORG: none

TITLE: New method of solution annealing narrow strips with direct resistance heating

SOURCE: Hutnik, no. 11, 1966, 466-473

TOPIC TAGS: steel heat treatment, steel solution annealing, solution annealing equipment, annealing, pyrometer

ABSTRACT: A new method and equipment for annealing narrow steel strips has been tested. In this method (see Fig. 1) steel strip 1 unrolls from drum 2 around guiding roll 4 and over roll electrodes 5 and 6 where it is heated to the required temperature. The flanges of rolls 5 and 6 are immersed in liquid Wood alloy 9 connected to transformer leads 8. The annealed steel strip is rapidly cooled by a stream of air from nozzle 10 and coils around drum 3. The temperature is measured by photoelectric pyrometer 11. The heat loss is prevented by insulating screens 12. The method was successfully tested on 1H18N9T steel strips, 30 mm wide and 0.5 mm thick, at speeds of 12 and 25 m/min, at 1100 and 1130C, respectively. Other types of tested strips were 0H18N9 steel strips (98 x 0.8 mm) and H17 steel strips (105 x 0.5 mm). The new

Card 1/2

UUC: 621.785.371.012.3:621.771.237.016.3

ACC NR: AP6036807

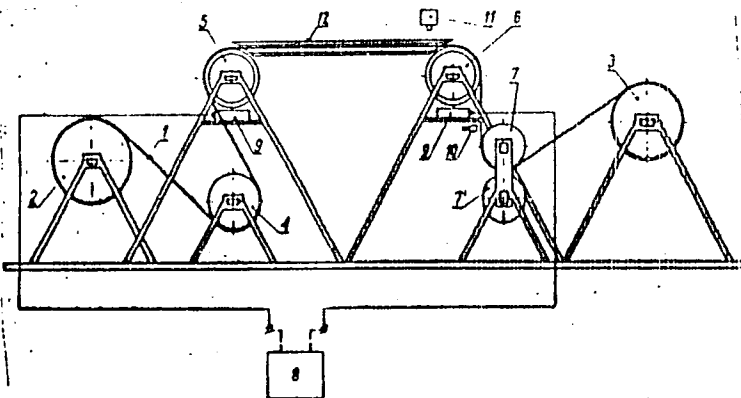
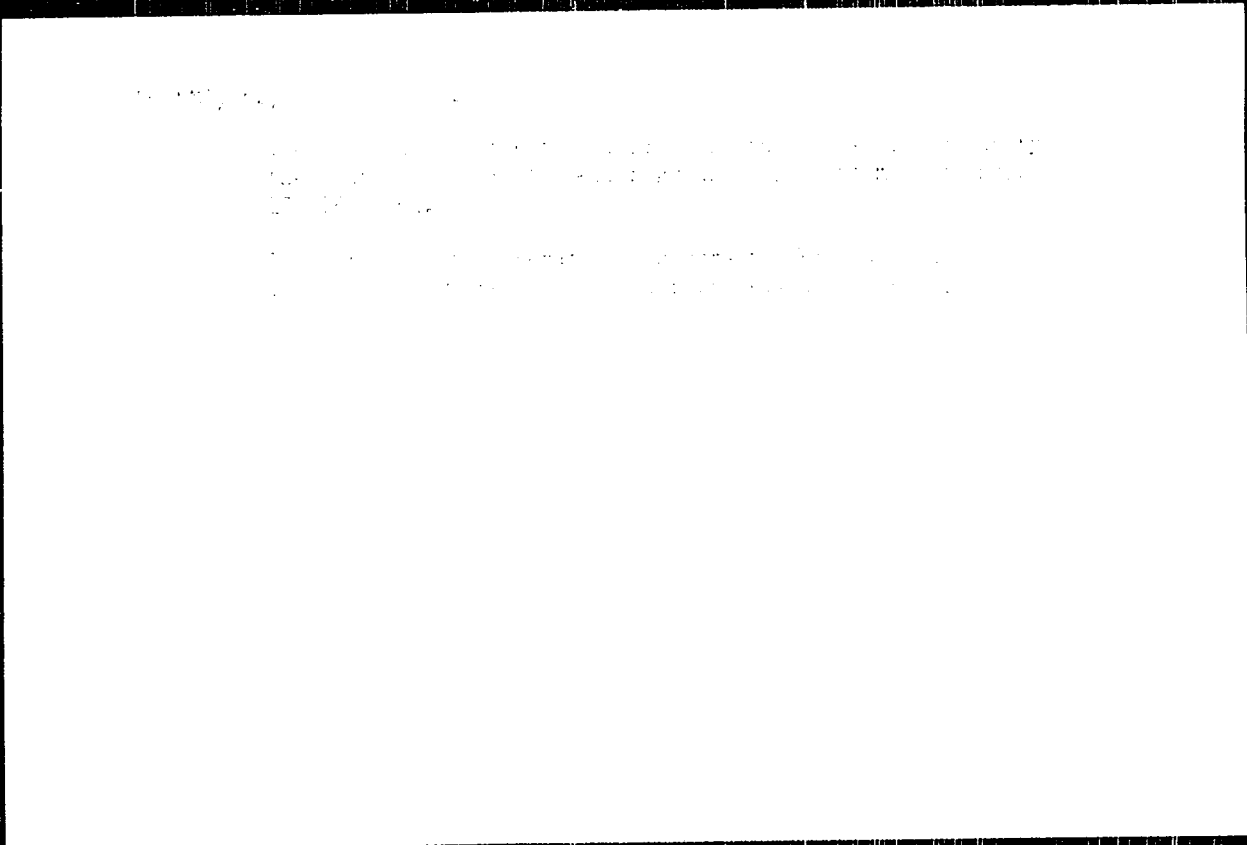


Fig. 1. Layout of equipment for continuous annealing of narrow strips with direct resistance heating

method fulfills all the quality requirements and at the same time speeds up the annealing process by about six times, as compared with the conventional method. Orig. art. has: 10 figures and 9 formulas.

SUB CODE: 11, 13, 14/ SUBM DATE: none/ ATD PRESS: 5107

Card 2/2



ROJEMANOV, Kresisto

SURNAME, Given Names

Country: Bulgaria

Academic Degrees: not given

Affiliation: not given

Source: Sofia, Khrisna, Vol IV, No 5, Sep/Oct 1961, pp 45-50

Data: "The Role of Our Renaissance Press in the Fight against Self-Appointed Quacks and for True Medical Aid to the Population."

GPO 981643

GOLEMANOV, Khr.; MALIAKOV, M.

Studies on the problem of the time of seeking medical aid by patients with breast cancer in the Sofia region. (the period 1952-1961). Khirurgia (Sofia) 16 no.10: 925-929 '63.

1. Respublikanski dom za zdravna pravota (gl. lekar: Khr. Golemanov) i Otkrivena bolnica "D-r.R. Angelov", Sofia (gl. lekar: P. Kotsev).

*

KOLYANG, ...

Cutting, notches and polishing cylindrical rollers in flour mills. p. 22

Vol. 1, no. 1, Oct./Nov. 1951
TEKNIKA
Sofiya, Bulgaria

See: Eastern European Literature: Vol. 9, No. 1, April 1956

GELINOV, K.; PESHEV, I.; GOLEMANOV, V.

Case of ornithosis. Suvrem. med., Sofia 8 no.12:109-113 1957.

1. Iz Klinikata po bolnichna terapiia pri VMI-Sofia (Zav. katedrata; prof. Al. Pukhlev) i Instituta po rentgenologija i radiologija pri VMI --Sofia (Zav. katedrata: prof. A. Nikolaev).

(ORNITHOSIS, differ. diag.

pneumonia, atypical (Bul))

(PNEUMONIA, differ. diag.

ornithosis, from atypical (Bul))

PRUVCHEV, N.; COLEMANOV, V.

On the problem of sinusitis in childhood. Khirurgiia (Sofia)
16 no.10:937-947 '63.

1. Vissh meditsinski institut, Sofia, katedra po ushni, nosni,
i gurleni bolesti. Rukovoditel na katedrata: prof. G. Iankov.

*

GOLEMANSKI, V.

Protozoa and low temperatures. Part 1. Znanstvena razprava, 1970, 1, 1-10.

GOLEMANSKI, Vasil Gr. biolog.

Unicellular organisms in service to man. Prir i znanie 12 no.10:
11-13 D '59. (EEAI 9:10)
(Cells)

GOLEMANSKI, Vasil Gr.

Coccidia on the domestic mammals and poultry. Prir i znanie 13 no.4:
9-12 Ap '60. (EEAI 9:10)
(Scale insects) (Mammals) (Poultry)

GOLEMANSKI, Vasil

Animal rockets. Prir i znanie 14 no.10:7-9 D 161.

GOLEMANSKI, Vasil Gr.

Studies on the species and biology of Coccidae in turkeys
in Bulgaria. Godishnik biol 54/55 no.1:229-245 '59/60-'60/61
[publ. '62].

GOLEMANSKI, V.

130 years of the death of J.W. von Goethe. Some of his aphorisms
and utterances. Prir i znanie 15 no.2:23-24, F 162.

GOLEMANSKI, V., asistent (gr. Ntserkore, Gvinea)

From the biology of termites. Priroda Bulg li no.5:86-90
S-0 '62.

1. Katedra po obshcha biologiya pri Sofiskia dnrzhaven
universitet.

GOLEMAN, V.

Soil Protozoa and their biologic importance. *Trudy Vuzovskogo
no.6:83-85 N-D '64.*

GOLESIAS

...
... of Gulean forests. Pair 1 zrania 17 no. 6:
10.11 de 1941

GOLEMANSKI, Vasil Gr.

Species and biology of Coccidator on birds in Bulgaria. Pts.2-3.
Godishnik biol 50 no.1:71-103 '61-'62 [publ. '64].

1. Chair of General Biology, Rural Economy, and Teaching of
Natural Sciences of the Faculty of Biology, Geography, and
Geology of the University of Sofia, Sofia (Head of the Chair:
[dots.] Il.Karageorgiev).

GOLEMANSKI, Vasil

Studies on the epibiont Infusoria in the Gammarus (Sivulogammarus)
crustaceous genus in Bulgaria. IzvZool inst BAN 14:157-165 '64.

MATIN V. GOLEMANOVSKI, V. [Golemanovskii, V.]

A contribution to the knowledge of Lithobiidae (Chilopoda, Lithobiomorpha) in Bulgaria. *Gornitski sbor* 57 no.1:99-106. 162-163 [publ. 164].

1. Chair of Zoology of the Institute of Cluj, Cluj, Romania, 1974-1975. 2. Chair of General Biology of the Faculty of Biology, Sofia, 1976-1977. 3. The University of Sofia, Sofia (Head of the Chair), 1978. Karagoriev, Il. [Karageorgiev, Ilina] (1978-1981).

ARMYAN V, Vardan Yakovlevich; GUMBA, Pavel Ioifovich;
BACHKINNYAN, L.S., ed.

[Parasitology] Seriya 11. Tekhn, Meditsin, 1971.
302 p. (1971)

GOLEVA, P. I. Maj

USSR/Medicine - Lymphogranuloma Venereum Jan/Feb 1948
Medicine - Penicillin

"Penicillin Therapy of Quaternary Venereal Disease,"
Maj P. I. Goleva, Med Corps; Sr Lt Ye. K. Rembold-
vich, Med Corps, N-th Mil Hosp, 2 pp

"Vest Vener i Dermat" No 1

PA 41782

Studies gave following results: 1) Penicillin is very effective therapeutic for treatment of lymphogranulomatosis of the groin. 2) In most cases penicillin alone is sufficient for healing. 3) Penicillin greatly reduces number of days necessary for treatment as bed patients. 4) Dose can be reduced considerably if a sulride-penicillin compound is used. 5) Intravaginal

41782

USSR/Medicine - Lymphogranuloma Venereum (Contd)
Jan/Feb 1948

Injections are a most effective method of therapy.
Chief of N-th Military Hospital is Col I. I. Okhloby-
stin, Med Corps.

41782

USSR/Medicine - Penicillin
Medicine - Gonorrhoea, Therapy

May/Jun 48

"Criterion of Recovery Following Penicillin
Therapy," Maj P. I. Colemba, Med Sr, Capt Z. I.
Blich, Med Sr, 1 1/2 pp

"Vest Venerol 1 Dermatol" No 3

Discovery of intracellular gonococci on the day
after completion of penicillin therapy, especially
in those with favorable clinical report, does
not indicate therapeutic failure. In some cases,
those gonococci which had been once observed
disappeared without further treatment. Results

18/4gr76

USSR/Medicine - Penicillin (Contd) May/Jun 48
of penicillin therapy can be judged only by repeated
microscopic examinations.

18/4gr76

GOLEBA, P. I.

34/4987

USSR/Medicine - Literature, Medical. Jul/Aug 48
Medicine - Venereal Diseases, History

"Review of A. N. Osharov's Book, 'Handbook on Venereal
and Other Skin Diseases,'" P. I. Golemba, 1½ pp

"Vest Venerol i Dermatol" No 4

Reviews favorably. Mentions faults which should be
corrected in next edition. Published by Tatgouizdat,
Kazan, 1947, 169 pp, 3,000 copies.

34/4987

1941.

... ..
1942, No. 5.

GOLEMB, P.I.

163742

USSR/Medicine - Venereal Diseases, Jan/Feb 50
Prevention

"Second Thematic Conference on the Organization of the Control of Venereal and Skin Diseases in Rural Areas," P. I. Golemba, Cand Med Sci, L. S. Iof, Cand Med Sci

"Vest Venerol i Dermatol" No 1, pp 42-58

Details conference held 28-30 Sep 49 at Gen Dermato-Venerol Inst. Opening address given by A. I. Shabanov, Dep Min, Min of Pub Health USSR. Addresses given by V. Ya. Arutyunova, head of Sec on Control of Venereal and Skin

163742

USSR/Medicine - Venereal Diseases, Jan/Feb 50
Prevention (Contd)

Diseases of the ministry, G. F. Konstantinov, head of Adm for Med and Prophylactic Aid to the Rural Pop of the ministry, and others.

163742

GOLYEMBA, P. I.

Hemosiderosis of the skin. Vest. vener., Moskva no.5:22-24
Sept-Oct 1951.

(CIML 21:1)

1. Candidate Medical Sciences. 2. Of the Department of
Dermatology (Head -- Prof. L. N. Mashkilleyson), Central
Skin-Venereal Institute (Director -- Candidate Medical Sciences
N. M. Turanov) of the Ministry of Public Health USSR.

GOLEMBA, P.I., kandidat meditsinskikh nauk.

[Care of the skin and the hair] Ukhod za kozhei i volosami.
Moskva, Medgiz, 1953. 46 p. (MLRA 6:12)
(Hair--Care and hygiene) (Skin--Care and hygiene)

GOLEBA, F. I.

4787. GOLEBA, F. I. Ukhod za kozhey i volesami. --- a. a. chalov. gneynichkovyye zabolevaniya kozhi. riga, latgosizdat, 1954. 72s. s ill. 17 sm. (b-ka)(zdrav'ya). 5.000 ekz. 90 k. -- na latysh. yaz. --- (54-57104) 613.4+16.5-002.3

SO: Letopis' Zhrunal' nykh Statey, Vol. 7, 1949

GOLEMBA, P.I.

GOLEMBA, P.I., kandidat meditsinskikh nauk

Epidemiological importance of pityriasis simplex of the face. Vest.
ven. 1 dermat. no.1:45 Ja-F '55. (MLBA 8:4)

1. Iz 13-y detskoy infektsionnoy bol'nitsy Mougorsdravotdela.
(SKIN--DISEASES) (COMMUNICABLE DISEASES)

GOLEBA, P.I., kandidat meditsinskikh nauk, (Moskva)

Furacillin therapy for pyoderma in children. Vest. ven. i dern.
no. 3:52-53 My-Je '55. (MLRA 3:10)

(SKIN-DISEASES) (FURACILLIN)

ARUTYUNOV, V.Ya., professor.; GOLEMBEA, P.I., kandidat meditsinskikh nauk.

"Diseases of the hair and scalp" (in French). A. Desaux, ed. Reviewed
by V. IA. Arutiunov, P.I. Golemba. Vest. ven. i derm. no.5:55-56
S-O '55. (MLRA 9:1)

(HAIR-DISEASES) (SCALP-DISEASES)

GOLEMBA, P.I.

ARUTYUNOV, V.Ya., prof.; GOLEMBA, P.I., kand.med.nauk (Moskva)

Clinical aspects and therapy of the cutaneobullous form of porphyria disease. Klin.med. 35 no.7:115-118 J1 '57. (MIRA 10:11)

1. Iz kliniki kozhnykh i venericheskikh bolezney (dir. - prof. V.Ya. Arutyunyan) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta (dir. - kandidat meditsinskih nauk P.N. Leonenko)
(PORPHYRIA, complications,
skin bullous dis. (Rus))
(SKIN DISEASES, etiology and pathogenesis,
bullous dis. in porphyria (Rus))

GOLEBA, P.I., kand.med.nauk

Epidemiology of herpes zoster [with summary in English]. *Pediatrics*
36 no.4:59-62 Ap'58 (MIRA 11:5)

1. Iz 13-y detskoy infektsionnoy kol'nitsy Mosgorzdravotdela
(glavnyy vrach Yu.P. Panfilova)
(HERPES ZOSTER)

ARUTYUNOV, V.Ya.; GOLEMBA, P.I.

Problem of keratoacanthoma. Vop. onk. 5 no.10:480-483 196.

(SKIN--TUMORS)

(MIFA 13:12)

GOLEMBA, P.I., kand.med.nauk

On the problem of reticulosis in dermatology; a survey. Vest.derm. i
ven. 33 no.5:33-40 S-O '59. (MIRA 13:2)

(RETICULOENDOTHELIOSIS)

ARUTYUNOV, V.Ya.;_GOLEMB, P.I.; ODINOKOVA, V.A.

Skin changes in reticulosis. Klin.med. 38 no.7:120-128

1960.

(MIRA 13412)

(RETICULO-ENDOTHELIAL SYSTEM--DISEASES)

(SKIN--DISEASES)

ARUTYUNOV, V.Ya.; GOLEBA, P.I.; ODENKOVA, V.A.

Clinical and pathoanatomic symptoms and course of reticulosis of the skin. Vop. klin. pat. no.2:252-256 '61 (MIRA 16:12)

1. Iz kliniki koznykh bolezney (zav. - prof. V.Ya. Arutyunov) i patoanatomicheskogo otdela (zav. - prof. S.B. Vaynberg [deceased]) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo Instituta imeni Vladimirovskogo.

ARUTYUNOV, V.Ya., prof.; GURVICH, Ye.I., prof.; GOLEBA, P.I., kand.med.nauk

Skin manifestations in nodular vasculitis. Vest.derm.i ven. no.5:
29-33 '61. (HIPA 14:12)

1. Iz kliniki kozhnykh i venericheskikh bolezney (dir. - prof.
V.Ya. Arutyunov) Moskovskogo oblastnogo nauchno-issledovatel'skogo
klinicheskogo instituta imeni M.F. Vladimirovskogo (dir. - kand.
med.nauk P.M. Leonenko).

(BLOOD VESSELS--DISEASES) (SKIN)

ARUTYUNOV, V.Ya., prof.; COLEMAN, P.I., kand.med.nauk

Controversial problems in hemoderma. Vest.derm.i ven. no.8:
7-13 '62. (MIRA 15:9)

1. Iz kliniki kozhnykh i venericheskikh bolezney (dir. - prof.
V.Ya. Arutyunov) Moskovskogo oblastnogo nauchno-issledovatel's-
skogo klinicheskogo instituta imeni M.F. Vladimirovskogo (dir. -
zasluzhennyy vrach respubliky P.M. Leonenko).
(BLOOD--DISEASES) (SKIN--DISEASES)

ARUTYUNOV, V.Ya., prof.; GOLEMBA, P.I., kand.med.nauk

Eosinophilic reticulosis of the skin. Sov.med. 26 no.9:112-118 Ag
'62. (MEFA 15:10)

1. Iz kliniki dozhnykh i venericheskikh bolezney (dir. - prof.
V.Ya.Arutyunov) Moskovskogo oblastnogo nauchno-issledovatel'skogo
klinicheskogo instituta imeni M.F.Vladimirovskogo (dir. - kand.med.
nauk P.M.Leonenko).

(LEUKEMIA) (SKIN--DISEASES)

GOLEBA, P.I.

Zonal ultraviolet irradiation in some dermatoses. Vop.kur.
fizioter. i lech. fiz.kul't. 28 no.2:143-146 Mr-Ap'63.

(MIRA 16:9)

1. Iz kliniki kozhnykh i venericheskikh bolezney (dir.-prof.
V.Ya. Arutyunov (Moskovskogo oblastnogo klinicheskogo insti-
tuta imeni N.F.Vladimirovskogo (dir. - kand.med.nauk. P.M.
Leonenko).

(ULTRAVIOLET RAYS--THERAPEUTIC USE)

(SKIN--DISEASES)

GOLEMANSKI, Vasil

Cultivation and study of *Paramecium caudatum* Ehrenberg.
Biol i khim 7 no.5:59-62 '64.

ACC NR: AT7004332

SOURCE CODE: UR/0000/66/000/000/0150/0155

AUTHOR: Golembo, V. A. (L'vov); Kirianaki, N. V. (L'vov)

ORG: none

TITLE: Reference-voltage sources with small time drift

SOURCE: AN UkrSSR. Metody i sredstva preobrazovaniya informatsii (Methods and means of information conversion). Kiev, Naukova dumka, 1966, 150-155

TOPIC TAGS: voltage stabilization, voltage stabilizer

ABSTRACT: The zero-point drift of reference voltage sources depends on the stability of the voltage-regulating (Zener) diodes used. Soviet-made and foreign diodes (I. Monroe et al., Instr. Contr. Sys., no. 1, 1962) are stable in time within 0.008-0.02%, which is inadequate for some applications. The stability of a voltage stabilizer can be enhanced by connecting a number of Zener diodes in

Card 1/2

ACC NR: AT7004332

series, thus averaging their instability characteristics and reducing the instability on the whole. Probabilistic curves of the time instability of voltage stabilizer against the number of series-connected diodes demonstrate the efficiency of the method, which is held particularly suitable for constant-load applications. Orig. art. has: 6 figures and 4 formulas.

SUB CODE: 09 / SUBM DATE: 14Jul66 / ORIG REF: 006 / OTH REF: 003

Card 2/2

POLAND/Soil Science - Soil Biology.

J

Abs Jour : Ref Zhur Biol., No 19, 1958 86794

Author : Vruble' T., Golendevska, Yu.

Inst : -
Title : The Inoculation of Leguminous Plants with Nodule-forming Bacteria in Various Soils.

Orig Pub : Acta microbiol. polon., 1956, 5, No 1-2, 121-124

Abstract : A study was made of the effects of nodule-forming bacteria on the crop and on N accumulation in alfalfa, lupine, saradelle, peas in sandy, sandy loam, alluvial soils, podzolic loam, loess and chernozem in vegetation experiments. With bacterization, the alfalfa especially in sandy, sandy loam soils and loess produced the greatest gains in crop and N. The pea crop was raised only on sandy loam soil and podzolic loam, of lupine in all soils, saradelle in podzolic loam and especially in alluvial soil. It is noted that the dimensions, forms, arrangement, coloration of the root

Card 1/2

POLAND/Soil Science - Soil Biology.

Abs Jour : Ref Zhur Biol. No 10, 1958, 86794

J

S/704/61/000/002/005/006
D201/D302

AUTHORS: Golembiowskiy, P.S. and Mezhenyy, Yu., Ya., Engineers

TITLE: A thyatron time relay for relay protection and system automation

SOURCE: Ukraine. Gosudarstvennaya planvoya komissiya. Institut avtomatiki. Avtomatizatsiya i priborostroyeniye; sbornik nauchnykh trudov, no. 2, Kiyev, 1961, 139-146

TEXT: The authors described a thyatron time relay developed by them at the Institute of Automation. The relay is intended for relay protection systems, has a small power consumption, good temperature stability and has no mechanical moving parts. The main component used is a cold cathode thyatron ~~MTX~~-90 (MTKh-90), although other types of cold cathode thyatrons may be used. The principle of operation is the discharge of a capacitor. The capacitor is connected at the bottom end of a potentiometer, whose upper part consists of a variable resistor connected to an HF rail. Limiting resistor connects the thyatron grid to the RC junction. The

Card 1/3

S/704/61/000/002/005/006
D201/D302

A thyatron time relay ...

thyatron has in its anode circuit an interval d.c. relay which is able to switch considerable powers. The re setting of the relay is achieved by connecting a semi-conductor diode parallel to the variable resistance of the RC potentiometer chain. With the control signal applied (i.e. with application of the voltage to the circuit) the diode is biased in reverse at its cathode by the positive potential of the HT rail. When the control signal is removed, the diode anode, connected to the charged capacitor of the thyatron grid circuit, becomes more positive than its cathode, the diode conducts and the capacitor in the grid circuit discharges quickly through the resistor of the RC chain and the resistances of the supply filter and the thyatron anode current limiting resistor. The relay may be d.c. or a.c. operated, the only difference being a bridge rectifier incorporated between the a.c. supply and the thyatron circuit. Laboratory experiments with the above type of d.c. or a.c. operated time relay have shown the following. The relay consumes little power and has a small spread of operating time characteristics (less than ± 0.1 sec), it has a good temperature stability, permits a large number of operations (0.5 - 1 million) and easy changes of its range by a simple change of the RC network.

Card 2/3

A thyatron time relay ...

S/704/61/000/002/005/006
D201/D302

components. It is concluded that it is possible to have a time relay operating for 0-4, 0-10 and 0-20 sec., i.e. at all time interval ranges used in relay protection. There are 5 figures and 10 references: 9 Soviet bloc and 1 non-Soviet bloc

Card 3/5

GOLEMBIOWSKIY, P.S., KOSTENKO, V.A.

Device for directional signaling of short circuits to ground in
noncompensated electric power distribution networks. Avtom. a
prib. no. 3:58-61 J1-S '64. (MIRA 18:3)

GOLEMBIOWSKI, Pavel Semenovich, inzh., S.S.S.R., Ivan Petrofenovich,
inzh.; KALAKHIN KTY, Yevgeniy Vasovitch, inzh.; KALININ,
Pavel Matveyevich, kand. tekhn. nauk; KISHINEVSKIY,
Vladimir Yekovlevich, inzh.; KISH V, S.Ya., inzh.,
retsensent

[Relay protection and automatic control devices using
operative a.c.] Relichnaya zaschita i upravlyeniye avtona-
tiki na peremennom operativnom toke. [by I.I. Golembiovskii
i dr. Kiev, Tekhnika, 1962. 209 p. (MIRA 17:10)

KANTER, I.I., inzh.; GOLEMBIOVSKIY, Yu.M., inzh.; MAZIN, B.A., inzh.

Three-phase bridge-type transistor frequency converter.
Elektrotehnika 34 no.10:64-68 0 '63. (MIRA 16:11)

ORLOWSKI, Jan; GOLEMBIOWSKI, Jacek; GRZEBIENIOWA, Zofia

Isolation of the β' -isomer from technical hexachlorocyclohexane.
Pt. 2. Przem chem 39 no.1:32-34 Ja '60.

1. Instytut Przemysłu Organicznego, Warszawa, Zakłady Chemiczne
AZOT, Jaworzno

LOMBROSKI, S.; Popielarz, E.; Giocowicz, T.

The problem of seasoning wood in the vapors of organic liquids in the light of present achievements. p. 251.
(PRZEMYSŁ DRZEWNY. Vol. 7, No. 8, Aug. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (SEAL) I. Vol. 6, No. 12, Dec. 1957.
Uncl.

21-7000

20993

P/013/61/000/002/001/001
B115/B215

AUTHOR: Golembiowski, Stanislaw, Magister
TITLE: Use of nuclear reactors for the synthesis of nitrogen oxides
and other chemical compounds
PERIODICAL: Chemik, no. 2, 1961, 49-52

TEXT: The present paper, a compilation of several studies in this field is the first of a series of publications on the possibilities of applying radiochemistry and isotopes. A Pracownia Izotopów (Laboratory of Isotopes) is being established at the Instytut Chemii Nieorganicznej (Institute of Inorganic Chemistry). Industrial requirements and interests have to be taken into account in setting up the working subjects of the laboratory. In the nuclear reactor, the fragment energies of (a) quantum, (b) particle, and (c) fission can be utilized for the formation of chemical compounds. Depending on the construction of the reactor, mainly energies (a) and (b) (version I) or (a), (b), and (c) (version II) are utilized. Since the fragment energy amounts to 84% of the fission energy, only (c) will be used in version II. (1) Source of energy for the synthesis of nitrogen oxides.

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Card 1/8