

*KUNICKI - GOLDFINGER, Wl.*  
Poland Microbiology. General Microbiology. F-1

Abs Jour: Referat.Zh.-Biol., No. 9, 1957, 35480

Author : Kunicki-Goldfinger, Wl.

Title : Changeability of Bacteria

Orig Pub: Acta microbiol. polon., 1954, 3, No. 3, 199-347

Abstract: A critical survey. The essence of the problem of changeability of bacteria is discussed in the 1st chapter. In the 2nd chapter the idea of the individual and specie is determined. The 3rd chapter is devoted to a classification of the types of changeability which the author divides into changeability of development, modification changeability, mutilization and hybridization. Variability of development-cytomorphosis

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Abs Jour: Referat.Zh.-Biol., No. 9, 1957, 35480

and heteromorphosis are analyzed in chapters 4 and 5. Under the latter, the author enumerates dissociation, reactive forms, and filtering and L-forms; he criticizes the opinions of Brown of dissociation as a manifestation of spontaneous mutations. In chapters 6-9, modification changeability is described-biochemical changeability, the formation of phago- and drug-resistant forms, variability of antigens, mutilations. The author considers all these forms adaptations. Also given is a criticism of the work of Louis, Ryan, Demerec, Luria, and Delbrook. In chapter 10 the problem of sex, transformation and hybridization in bacteria is discussed. Chapter 9 is devoted to the process of specie formation, in which, in the opinion of the author, modification changeability,

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Abs Jour: Referat.Zh.-Biol., No. 9, 1957, 35480

hybridization and selection plays a fundamental role. Included are 18 drawings and 21 photographs. A bibliography of 784 titles.

Card 3/3

KUNICK-GOLD-FINGER W

✓ The hemolysin of *Escherichia coli* Wladyslaw Kunicki  
 Goldfinger, Stanislaw Czarnas, and T. Pado, Zaklad  
 Mikrobiologii, Instytut Medyczny, Warszawa, 4 (1971)  
 (1972).—The hemolysin (H) was found in cultures of 7  
 hemolytic strains of *E. coli*, grown under various conditions  
 and in various media. Addn. of hemoglobin, stroma of  
 erythrocytes, and lecithin to the culture medium, and  
 growth of *E. coli* in culture with a virulent bacteriophage  
 did not affect the production of H. Analyzed  
 by the method of Roberts.

3

Med

~~W. Kunicki-Goldfinger and A. Marz~~  
Goldfinger W. Kunicki

4327. Influence of bacterial exotoxins on *Paramecium*. W. Kunicki-Goldfinger and A. Marz. *Acta microbiol. polon.* 1955.  
4. 127-129 - The effect of culture filtrates containing toxins of *Clostridium welchii*, *C. botulinum* type A and type B, and *Corynebacterium diphtheriae* on *Paramecium aurelia* was studied. The filtrates after the inactivation of toxins and the incubated media had similar protozoocidal properties to toxin-containing fluids.  
B. Vinay.

①

KWIATKOWSKI, Z.; ~~KUNICKI, GOLDFINGER, W.~~; LORKIEWICZ, Z.

Certain physiological properties of *Proteus vulgaris* L form.  
Acta microb. polon 5 no.1-2:15-19 1956.

1. Z Zakładu Mikrobiologii Ogólnej UMCS w Lublinie.  
(*PROTEUS VULGARIS*,  
L form, physiol. (Pol))

KUNICKI-GOLDFINGER, W.; DYGDALA, K.; LAGOWSKA, M.; WIERCIENSKA, D.

Effect of lithium chloride on *Escherichia coli* and on other bacteria; preliminary communication. Acta microb. polon 5 no.1-2:33-40 1956.

1. Z Zakladu Mikrobiologii Ogolnej UMCS w Lublinie.
  - (LITHIUM, effects, chlorides, on *E. coli*, *Bacillus subtilis* & *Proteus* (Pol))
  - (CHLORIDES, effects, lithium chloride, on *Bacillus subtilis*, *E. coli* & *Proteus* (Pol))
  - (BACILLUS SUBTILIS, effect of drugs on, lithium chloride (Pol))
  - (ESCHERICHIA COLI, effects of drugs on, same)
  - (PROTEUS, effect of drugs on, same))

POLAND/Microbiology - General Microbiology.

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Abs Jour : Ref Zhur - Biol., No 11, 1958, 47054

Author : Kunicki-Goldfinger, W., Dydala, K., Lagowska, M.,  
Wiercienska, D.

Inst : -  
Title : Gonidial Bacteria.

Orig Pub : Acta Microbiol Polon, 5, no 1-2, 41-43 (1956) (in Polish  
with an English summary)

Abstract : Gonidial bacteria were isolated from the intestinal contents  
of small rodents and insectivora and cultured by the method  
of Odur <sup>[TN: spelling uncertain]</sup> (Ann Inst Pasteur, 86,  
395 (1954)). These bacteria form microcolonies on agar  
consisting of elementary bodies 0.2-0.3  $\mu$  in diam and in  
broth give a light opalescence. The addition of blood,  
serum, of yeast and liver extracts, and of intestinal con-  
tents extract from rodents did not change the character

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Abs Jour : Ref Zhur - Biol., No 11, 1958, 47854

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927520016-9"

of growth. On further transplantations the elementary  
bodies transform into diphtheroids 0.5-1.5  $\mu$  in size.  
On agar the latter form colonies resembling streptococci  
colonies and in broth they produce turbidity and a residue.  
The reverse transformation of diphtheroids into the goni-  
dial forms could not be observed. The gonidial bacteria  
described are sensitive to penicillin, are very stable on  
storage, and retain their viability on dehydration or in  
broth for two years.

Card 2/2



KUBICKI, GOLDFINGER, W., ROWINSKI, S.

Some studies on the structure of bacterial colony. Acta Microb.  
polon. 6 no.4:321-330 1957

1. Z Zakladu Mikrobiologii Uniwersytetu Wroclawskiego i Zakladu  
Mikrobiologii Ogolney Instytutu Immunologii i Terapii Doswiadczalnej  
im. L. Hirszfelda we Wroclawiu Wplynelo dnia 1 wrzesnia 1957 r.  
(BACILLUS, culture  
growth & colony form (Pol))

KUNICKI-GOLDFINGER, W.; DROZANSKI, W.; BLASZCZAK, D.; MAZUR, J.; SKIBINSKA, J.

Bacteria as food for soil amoebae. Acta Microb. polon. 6 no.4:331-344  
1957.

1. Z Zakladu Mikrobiologii Uniwersytetu Wroclawskiego we Wroclawiu i  
Zakladu Mikrobiologii Ogolnej Uniwersytetu Marii-Curie-Sklodowskiej  
w Lublinie Wplynelo dnia 20 wrzesnia 1957 r

(AMOEBA, metabolism

soil bact. as food source, growth & develop (Pol))

(SOIL, microbiology

bact. as food source for amoeba, growth & develop. (Pol))



KUNICKI-GOLDFINGER, W.

Bronislaw Niklewski (1879-1961) as a microbiologist. Acta microbiol.  
pol. 10 no.2:123-127 '61.

(MICROBIOLOGY hist) (BIOGRAPHIES)

KUNICKI-GOLDFINGER, Wladyslaw J. H.

Adaptive enzymes in the pathway of tryptophane synthesis in *Escherichia coli*. (Preliminary note). *Acta microbiol. pol.* 10 no.2:129-133 '61.

1. From the Department of Microbiology, The University, Wroclaw.

(*ESCHERICHIA COLI* metab) (*TRYPTOPHAN* metab)  
(*ENZYMES* metab)

SKURSKI, Adam; SLOPEK, Stefan; KUNICKI-GOLDFINGER, Wladyslaw; MICHALSKA,  
Eugenia.

Studies on the mechanism of the phagocytic reaction. VII.  
Phagocytosis and S - R dissociation of Brucella bacilli. Arch.  
immun.ter.dosw. 8 no.3:389-394 '60.

1. Department of Mycology, Department of Bacteriology and  
Department of Microbial Genetics, Institute of Immunology and  
Experimental Therapy, Polish Academy of Sciences, Wroclaw.  
(PHAGOCYTOSIS)  
(BRUCELLA immunol)

KUNICKI-GOLDFINGER, Władysław; KUNICKA-GOLDFINGER, Władysława; przy współpracy  
technicznej KARUNOS, Zofii

Intestinal microflora of *Sorex araneus araneus* L. and *Cléthrionomys*  
*glareolus glareolus* Schreb. in natural conditions. I. Quantitative and  
qualitative characteristics of the intestinal microflora. *Acta microbiol.*  
Pol. 11 no.1/2:43-75 '62.

1. Z Katedry Mikrobiologii Uniwersytetu Warszawskiego w Warszawie i  
Zakładu Badania Ssakow PAN w Białowieży.

(INTESTINES microbiol) (INSECTIVORA microbiol)  
(RODENTS microbiol)

KUNICKI-GOLDFINGER, Wladyslaw; KUNICKA-GOLDFINGER, Wladyslawa

Intestinal microflora of *Sorex araneus araneus* L. and *Clethrionomys glareolus glareolus* Schreb. in natural conditions. II. General characteristics of separate strains. Acta microbiol. Pol. 11 no.1/2: 77-91 '62.

1. Z Katedry Mikrobiologii Uniwersytetu Warszawskiego w Warszawie.

(INTESTINES microbiol) (INSECTIVORA microbiol)  
(RODENTS microbiol)



KUNICKI-GOLDFINGER, Wladyslaw; KUNICKA-GOLDFINGER, Wladyslawa

Intestinal microflora of *Sorex araneus araneus* L. and *Clethrionomys glareolus glareolus* Schreb. in natural conditions. III. Seasonal variations. *Acta microbiol. Pol.* 11 no.1/2:93-110 '62.

1. Z Katedry Mikrobiologii Uniwersytetu Warszawskiego w Warszawie i Zakladu Badania Ssakow PAN w Bialowiezy.

(INTESTINES microbiol) (RODENTS microbiol)  
(INSECTIVORA microbiol) (WEATHER)

KUNICKI-GOLDFINGER, Wladyslaw J.H.; CZERWINSKA, Katarzyna

The environmental control of the conjugation in Escherichia coli K-12. II. The effect of temperature on effective pairs formation and on chromosomal transfer. Acta microbiol. Pol. 13 no.1:13-21 '64

1. From the Department of Microbiology, Warsaw University, Warsaw and the Microbiology Department, Wroclaw University, Wroclaw.

KUNICKI-GOLDFINGER, Wladyslaw J.H.; KUNICKA-GOLDFINGER, Wladyslawa.

Pasteurella-like microorganisms in small rodents. Acta microbiol. Pol. 13 no.4:341-347 '64.

1. From the Department of Microbiology, the Warsaw University, Warsaw, Poland.

HERDA, M., inz. CSc.; GESAK, K., inz.; WEBER, B., inz.; VYHNANEK, V., inz.;  
KUNICKY, L., inz.; SIMEK, J., inz.; PROSTREDNIK, K., inz.

Maps for area planning and records of the built constructions.  
Geod kart obzor 10 no.9/10:232-235 0 '64

KUNICKY, Ladislav, inz.

Aerial photogrammetry and railroads. Letecky obzor 8 no.38  
70-71 Mr'64

KUNICKY, Ladislav, inz.; VYHANANEK, Vlastimil, inz.

Use of ground photogrammetry for technical documentation. Geod  
kart obzor 9 no.8:210-213 Ag '63.

1. Ceskoslovenske statni drahy.

KUNIEV, S.

Preparation of machine-tractor stations for autumn and winter repairs of agricultural machinery. p. 1.

Vol. 6, no. 10, Oct. 1955  
MASHINIZIRANO ZEMEDELIE  
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

KUNIEWICZ, Helena; BROKMAN, Jadwiga; JOKAJTIS, Maria.

Significance of hemato-cerebrospinal sugar index in tuberculous meningitis and encephalitis. Gruzlica 23 no.10:701-706 Oct 55.

1. Z I Kliniki Chorob Dziecięcych A.M. w Gdansk. Kierownik: prof. dr. med. H.Brokman. Gdansk, I Klinika Pediatryczna A.M. ul. Debinki 7a.

(TUBERCULOSIS, MENINGEAL, metabolism, carbohydrates, hemato-encephalic passage)

(HEMATO-ENCEPHALIC BARRIER,

permeability of sugar in tuberc. meningitis)

(CARBOHYDRATES, metabolism,

hemato-encephalic passage in tuberc. meningitis)



KUNIEWICZ, Helena

Intoxication with antistine in a 3-year-old child. *Pediatr. polska*  
30 no.6:575-576 Je '55.

1. Z Kliniki Chorob Dzieciacych A.M. w Gdansk. Kierownik: prof.  
dr med. H. Brokman Gdansk, Debinki 7a.  
(ANTIHISTAMINICS, injurious effects,  
antazoline, in child)

KUNIEWICZ, Helena; SKARZYNSKA, Halina; ZYCHOWICZ, Czeslaw

Primary pneumonia in the course of varicella in children. Polski tygod.  
lek. 16 no.28:1074-1076 10 J1 '61.

1. Z I Kliniki Chorob Dzieci AMG w Gdansk; kierownik: prof. dr med.  
K. Erecinski.

(CHICKENPOX compl) (PNEUMONIA in inf & child)

KUNIEWICZ, Helena; LESIEWSKA, Jadwiga; ZYCHOWICZ, Czesław

Inflammation of the larynx and lower respiratory tract in measles in children. *Pediat. pol.* 37 no112:1289-1296 D '62.

1. Z I Kliniki Chorob Dzieci AM w Gdansk Kierownik: prof. dr med. K. Erecinski.

(MEASLES)

(LARYNGITIS)  
(BRONCHITIS)

(TRACHEITIS)

KUNIEWICZ, Helena; SZPAKOWSKA-DANKO, Wanda; SZCZURONA, Maria;  
KSIĘZOPOLSKA, Alicja; KREJCZY, Halina

Acute diarrheal syndrome with ulcerative and necrotic intestinal  
changes in infants. *Pediat. Pol.* 39 no.12:1347-1352 D 1964

1. Z I Kliniki Chorob dzieci Akademii Medycznej w Gdansk  
(Kierownik: prof. dr. med. K. Erccinski) i z Zakładu  
Anatomii Patologicznej Akademii Medycznej w Gdansk  
(Kierownik: prof. dr. med. W. Czarnocki [deceased]).

KUNIEWSKI, H.

000

Reporting from the [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

KUNICOWSKI, H

3592

621.314.21 621.315 621.392.2

EE  
MN

Kuniewicz H. The Effect of Power Transformers on H. F. Current Flow in H. T. Power Lines.

„Wplyw transformatorów mocy na rozplyw prądów wielkiej częstotliwości w liniach przemysłowych wysokiego napięcia”. (Prace Przem. Inst. Telekom. No. 13—14). Warszawa, 1954, PWT, 13 pp., 21 figs., 1 tab.

The results of the measurements, in a case of a single-conductor coupling system, of real and imaginary components of the impedance of various power transformers in the frequency range from 20 kc/s up to 300 kc/s. Characteristics of power transformers were analysed in connection with those of typical double-frequency blocking chokes with an inductance of 0.15 mH. There is also a discussion of the attenuation introduced at the end of an H. F. line section by power transformers without blocking chokes. A new method of using H. F. blocking devices is explained. In conclusion, the paper gives the results of the measurements of attenuation caused by power transformers, inserted between different sections of H. F. transmission lines. The lowest attenuation values in the range 20 . 300 kc/s are recorded for both star and delta connection.

KUNIEWSKI, H.

Short-range unbalanced telemetric systems with self-inductive electric power.

p. 202  
Vol. 28, no. 6, June 1955  
PRZEGLAD TELEKOMUNIKACYJNY  
Warszawa

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 2  
Feb. 1956

KUNIEWSKI, H.

Self-controlled telemetric systems. (To be contd.) p.272

PRZEGLAD TELEKOMUNIKACYJNY. (Stowarzyszenie Elektrykow Polskich. Sekcja  
Telekomunikacyjna) Warszawa., Poland  
Vol.28, no.8, Aug. 1955

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.1, Jan. 1960

Uncl.



KUNIEWSKI, H.

Telemetric self-controlling systems. (Conclusion) p. 304

Vol. 28, no. 9, Sept. 1955

PRZEGLAD TELEKOMUNIKACYJNY. Warszawa.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

KOHYAMA, H.

Directives for the handling of conductors while repairing transmission lines used for high-frequency telecommunication. p. 420

WORLD TELECOMMUNICATIONS YEARBOOK vol. 20, no. 14, Dec. 1973

Index

so. EAST ASIAN ACQUISITIONS LIST vol. 5, no. 10 Oct. 1960

22847

P/022/60/000/010/012/012

A222/A126

6.4100

AUTHOR: Kuniewski, H., Docent

TITLE: Selective ringing equipment, ITR system

PERIODICAL: Przegląd telekomunikacyjny, no. 10, 1960, 326-328

TEXT: The Instytut Tele-i Radiotechniczny (Institute of Telecommunication and Radio Engineering) designed a radio intercommunication system with frequency-selective ringing, in which the master station uses 13 audio frequencies and the subordinate stations 2 audio frequencies each. The variation results in 78 combinations; thus, the system comprises 78 remote stations which, in turn, are set up into 13 groups of 6 stations each. Such arrangement permits to call each group of 6 stations by means of only 4 frequencies transmitted at the same time. The 13 frequencies were allocated within the range of 420-3,000 cps with an irregular spacing. A block diagram of the master station comprises: a) 5 variable-tuning, RC audio generators (4 basic and 1 stand-by generator); b) output amplifier; c) cyclic ringing assembly; d) control and test board; e) power supply. It

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22847

Selective ringing equipment, ITR system

P/022/60/000/010/012/012  
A222/A126

has 78 push buttons for individual ringing of subordinate stations. The block diagram of a subordinate station is shown in Fig.3. The ready subordinate receiver is shown in Fig.4. Technical data of the transmitter: frequency range 420-3,000 cps; alignment accuracy  $\pm 1$  cps; frequency stability at a feed-voltage variation of  $\pm 10\%$  and temperature variation of  $\pm 10^\circ\text{C}$  and tube replacement is as good as  $\pm 1$  cps below 1,180 cps or 2% above 1,400 cps; amplitude stability under above conditions  $\pm 3\%$ ; linear distortion under unfavorable conditions is lower than 2%; output resistance  $600 \pm 10\%$ ; maximum power drain 130 va. Technical data of the receiver: bandwidth is  $\pm 20$  cps at 420 cps and  $\pm 75$  cps at 3,000 cps; maximum tolerable transmission level variation from about -0.8N (neper) to about +0.8N as measured against the 1,000 cps level; input resistance higher than 0.25 megohms; stand-by power drain 15 ma, on power drain 15 to 20 ma; dimensions 125 x 105 x 75 mm; weight 1.5 kg. There are 4 figures.

ASSOCIATION: Instytut Tele-i Radiotechniczny (Institute of Telecommunication and Radio Engineering)

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9.8000

P/022/61/000/003/002/002  
A076/A126

AUTHOR: Kuniewski, Henryk, Docent

TITLE: Transmitting sets of non-periodic impulse systems in long-distance  
telemetry

PERIODICAL: Przegląd Telekomunikacyjny, no. 3, 1961, 78 - 84

TEXT: After generally describing the main characteristics of non-periodic  
impulse systems, the author describes transmitting and receiving sets produced by  
the A.T.M. Strowger; the Bristol; the AEG; the L.M. Ericsson and the Landis  
Gyr Firms. The OLIZ transmitter, produced in the USSR, is also shown and its  
main parts described. There are 18 figures.

B

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KUNIEWSKI, Henryk, doc.

Instruments for personal paging. Prace Inst teletechn 6  
no.3:85-90 '62.

1. Instytut Tele-i Radiotechniczny, Warszawa.

KUNIEWSKI, Henryk, doc.

"Carrier-frequency teletransmission of information over high-voltage networks" by H.K. Podszcek. Reviewed by Henryk Kuniewski. Przegl elektrotech 38 no.11:478 '62.

KUNIEWSKI, Henryk, doc.

A set of equipment for selective calling installations. Prace  
Inst teletechn 4 no.1:90-93 '60.



KUNIK, V.P. inzh.

Use of curved screens in coal preparation plants. Shor. inform  
po obog. i brik. ugl. no.4:61-63 '57. (MIRA 11:6)  
(Coal preparation) (Screens (Mining))

KUNIK, V.P., inzh.

Improving coal properties for briquetting purposes at the Rhine  
briquet plant in Germany. Obog. i brik. ugl. no.6:63-66 '58.  
(MIRA 12:7)

(Germany, West--Briquets (Fuel))

KUNIK, V.P., inzh.

Increasing the efficiency of tubular steam driers by means of  
preliminary partial drying. Obog. i brik. ugl. no.7:74-76 '58.  
(MIRA 12:7)

(Coal--Drying) (Drying apparatus)

KURKIN, Yu.P., inzh.; KUNIK, V.P., inzh.

Graphic method of determining the results of coal crushing.

Obog.i brik.ugl. no.12:48-50 '59. (MIRA 13:6)

(Coal preparation)

ISAYEV, Ivan Nikolayevich; KUNIK, V.P., otv. red.; LOMILINA, L.N.,  
tekhn. red.; SHKLYAR, S.Ya., tekhn. red.

[Concentrating tables]Kontsentratsionnye stoly. Moskva, Gos-  
torgizdat, 1962. 100 p. (MIRA 15:10)  
(Ore dressing---Equipment and supplies)

KLIMANOV, Aleksey Dmitriyevich, kand. tekhn. nauk, dots.; RUDENKO, Konstantin Gerasimovich, kand. tekhn. nauk, dots.; KARPUKHIN, V.D., dots., retsenzent; OGLOBLIN, N.D., inzh., retsenzent; DREMAYLO, P.G., inzh., retsenzent; KUNIK, V.P., otv. red.; BOLLYREVA, Z.A., tekhn. red.

[Safety techniques and fire prevention in ore dressing and briquetting plants] Tekhnika bezopasnosti i protivopozharnaia tekhnika na obogatitel'nykh i briketnykh fabrikakh. Moskva, Gosgortekhnizdat, 1962. 362 p. (MIRA 15:10)  
(Coal preparation plants—Fire and fire prevention)  
(Ore dressing—Safety measures)

KUNIK, Ya., kand. yurid. nauk

A firm asks for the floor. Sov. torg. 37 no.10:16-20 0 '63.  
(MIRA 17:1)

KUNIK, Ya., kand. yurid. nauk.

Accounting by means of checks. Sov. tog. no.3:54-56 Nr '58.  
(Accounting) (Checks) (MIRA 11r2)



KUNIK, Yakov Abramovich; STARCHAKOVA, I.I., red.; BABICHEVA, V.V.,  
tekhn.red.

[Legal forms for intracity accounts in Soviet state trade]  
Pravovye formy vnutrigorodskikh raschetov v sovetskoi  
gosudarstvennoi trgovle. Moskva, Gos.izd-vo tog.lit-ry,  
1959. 61 p. (MIRA 12:6)

(Banks and banking)

KUNIK, Ya., kand.yurid.nauk

Delivery of goods and payment methods. Sov. torg. 33 no. 9:20-  
23 S '60. (MIRA 14:2)

(Delivery of goods)

(Payment)

KUNIK, Ya.

Let's inculcate progressive forms of payments. Sov.torg. 35  
no.4:26-28 Ap '62. (MIRA 15:4)  
(Russia---Commerce) (Payment)

ANTIMONOV, H.S., prof.; VEDEININ, N.N., kand. jurid. nauk; GENKIN,  
D.M., prof.; GRAVE, K.A., prof.; YEPANESHNIKOV, N.V.,  
dots.; ZHUKOVA, L.F., dots.; KUNIK, Ya.A., dots.;  
L'VOVICH, Yu.Ya.; MARGOLIN, M.Z.; MOROVSKAYA, T.A., dots.;  
POLENINA, S.V., kand. jurid. nauk; SADIKOV, I.N.; FIALKOV,  
M.A., kand. jurid. nauk; YAZEV, V.A., kand. jurid. nauk;  
YAKHNINA, N.A., kand. jurid. nauk; KIRAKOZOVA, N.Sh., red.;  
EL'KINA, E.M., tekhn. red.

[Government trade regulation] Regulirovanie gosudarstvennoi  
torgovli. Moskva, Gostorgizdat, 1963. 339 p. (MIRA 16:7)  
(Commercial law)

TYPOVSKY, K., As. Dr; FARGAS, Ed., Dr; KUNIK, Z., MUC

Surgical treatment of intra-articular fractures of the condyle of  
the tibia with the aid of a clip. Acta chir orthop Cz 21.no.1:  
8-14 P '54. (REAL 3:8)

1. Z chirurgické kliniky PU v Olomouci. Prednosta prof. MUDr  
Vlad. Rapant.

(TIBIA, fractures,

\*intra-articular fract. of condyle, surg. reduction with  
metal clip)

(FRACTURES,

\*tibia, intra-articular fract. of condyle, surg. reduction  
with metal clip)

BELIKOVICH, V.V.; KUNILOV, M.V.

Method for the quadratic transformation of signal amplitudes.  
Prib. i tekhn. eksp. 9 no.1:115-116 Ja-F '64. (MIRA 17:4)

1. Nauchno-issledovatel'skiy radiofizicheskii institut  
Gor'kovskogo gosudarstvennogo universiteta.

10

L 65295-65 EWT(d)/EWT(1)/FS(v)-3/FS-2 TT/AST/OW

ACCESSION NR: AP5021255

UR/0293/65/003/004/0618/0629  
629.195.2:621.39

AUTHORS: Getmantsev, G. G.<sup>44</sup>; Kalashnikov, N. I.<sup>44</sup>; Dykov, V. L.<sup>44</sup>; Benadiktov, Ya. A.<sup>44</sup>  
Yerukhinov, P. N.<sup>44</sup>; Belikovich, V. V.<sup>44</sup>; Bakhnin, V. M.<sup>44</sup>; Kantor, L. Ye.<sup>44</sup>; Korobkov, S.<sup>44</sup>  
Yu, S.<sup>44</sup>; Kunilov, M. V.<sup>44</sup>; Mitryakov, N. A.<sup>44</sup>; Puzrov, I. M.<sup>44</sup>; Rapoport, V. O.<sup>44</sup>; Sigalov,  
A. G.<sup>44</sup>; Cheropovitskiy, V. A.<sup>44</sup>; Akim, E. A.<sup>44</sup>

TITLE: The results of an experiment on radio communications via "Echo 2" and the moon at a frequency of 162.4 megacycles between the observatories of Jodrell Bank and Zimenki

SOURCE: Kosmicheskoye issledovaniya, v. 3, no. 4, 1965, 618-629

TOPIC TAGS: moon, satellite communication, radio telescope, radio transmission, satellite tracking, scientific research coordination / Jodrell Bank radio telescope, Zimenki observatory radio telescopes, BESM 2 electronic computer

ABSTRACT: During February-March 1964 the Academy of Sciences of the SSSR, NASA of the USA, and the General Post Office Department of Great Britain conducted an experiment to establish one-way radio communication at 162.4 megacycles via the passive satellite "Echo-2" and the moon. Echo-2 was used for 34 communication

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L 65295-65

ACCESSION NR: AP5021255

6

tests of 10-15 minutes (the time interval permitted by Echo's orbit), and the moon was used for 15 test runs between the Echo tests. The transmitting equipment at Jodrell Bank and the receiving unit of the Zimenki Observatory are described in detail. Echo orbit information furnished by NASA, visual observations, and radio tracking data from fixed stations were fed to a BESM-2 electronic calculator which provided programmed tracking control. The received signal exhibited strong fluctuations separable into two periods: 1) a 1-2 minute fluctuation associated with Echo-2 distortion from a sphere and with tracking errors; 2) a 3-10 second period associated with small surface irregularities. The rapid fluctuations varied with each test. Voice signals, slowed by a factor of 8, were barely intelligible. Telegraph, teletype, and photofacsimile transmission, in general, were unsatisfactory, but in periods of high signal-to-noise ratios intelligible messages were received. The moon transmissions were not as clear but did furnish scientific information. Unexpected transmission losses included 3-5 db for polarization losses and 1-2 db for unknown causes. The international cooperation was excellent, with the Soviet submitting a complete report. Offers for further cooperation have been extended. Orig. art. has: 3 tables, 7 figures, and 4 formulas.

ASSOCIATION: none  
SUBMITTED: 18Apr65  
NO REF SOV: 000  
Card 2/276

ENCL: 00  
OTHER: 002

SUB CODE: AA, EC



BOGATYREV, A.S., konstruktor zavoda, g. Irkutsk; MIKHAL'CHENKO, V.; TSUKASOV, I. (pos. Ili, Alma-Atinskoy obl.); KRYLOV, N.; SKRYABIN, A.; KUMILOV-SKIY, K., (Leningrad, Sinopskaya nab., 66, kv.5)

Advertisement board. Izobr. i rats. no.11:52-53 N '60.

(MIRA 13:10)

1. Leznikovskoye kar'yeroupravleniye, Zhitomirskoy obl. (for Mikhail'-chenko). 2. Predsedatel' pervichnoy organizatsii Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, g. Ivanovo (for Skryabin).

(Technological innovations)

PROCESSING AND PRESERVATION NOTES

26

CA

**Determination of the acidity of turpentine oils by electrochrometric titration.** A. M. Kunin, *Lakshim. Pr.* 1939, No. 11, 33-6; *Khim. Referat. Zhur.* 1940, No. 9, 80.—Add 100 cc. of an alc.-benzene mixt. (1:1) and 0.01-0.02 g. of quinhydrone to 5-10 g. of oil in a 200-300-cc. flask. To one of three tubes passing through the stopper of the flask connect a buret contg. alc. 0.1 N KOH. Seal a Pt wire to the end of the 2nd tube and immerse the end of the wire in the contents of the flask. Into the 3rd tube, fitted with a ground stopcock and dipping into the soln. under investigation, introduce 10% KCl soln. to which 0.01-0.02 g. of quinhydrone has been added, and a Pt spiral connected through Hg with a circuit breaker. After the app. had been assembled connect the galvanometer and titrate. W. R. Hunt

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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

Riabtsev, N. I. General fuel technology; a textbook Moskva, Gos. nauch.-tekhn. izd-vo nef'tianoi i gorno-toplivnoi lit-ry, 1949. 326. p. (50-15032)

TP318.R5

KUNIN, A. M.

GOYKHRAKH, I.M.; KUNIN, A.M.

[Semicoking of coal] Polukoksovanie uгля. Moskva, Gos. nauchno-  
tekh. izd-vo neflianoi i gorno-toplivnoi lit-ry, 1953. 193 p.  
(Coke industry) (MLRA 7:8)

*Кунин, А.М.*

TURSKIY, Yu.I.; BRIK, A.N.; KUNIN, A.M.; GAL'PERN, Ye.M.

Determination of small quantities of butyl acetate in water.  
Gaz.prom. no.9:11-13 S '57. (MIRA 10:10)  
(Acetates--Analysis) (Water--Analysis)

(2)

PHASE I BOOK EXPLOITATION

SOV/3340

Kunin, Aleksandr Maksimovich, and Mark Ikhelevich Derbaremdiker

Tekhnokhimicheskiy kontrol' gazovogo proizvodstva (Technical and Chemical Control of Gas Production) Moscow, Gostoptekhizdat, 1958. 331 p. 3,000 copies printed.

Executive Ed.: Ye.S. Lozbyakova, Engineer; Tech. Ed.: A.S. Polosina.

PURPOSE: The book is intended for laboratory personnel in gas works and gas-generating plants.

COVERAGE: The book is an attempt at a systematized presentation of the problem of quality control in the production of gas. The following steps of the production process are treated: control of the quality of coal used for gasification; quality control in the processes of production, dehydration and purification of gas from tars and hydrogen sulfide; and control in the dephenolization and repurification of waste waters. D.A. Muravlev collaborated with the authors in writing Chapter 5. Chapter 4 was written

Card ~~1/13~~

Technical and Chemical Control (Cont.)

SOV/3340

jointly by S.M. Golyand, T.K. Krapivina and M.M. Kuzmak.  
There are 46 references: 45 Soviet and 1 German.

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Foreword

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Methods of analyzing solid fuel	11
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RAKOVSKIY, V.Ya., doktor tekhn.nauk; RIVKINA, Kh.I., kand.tekhn.nauk;  
KUNIN, A.M., kand.tekhn.nauk; MAYZENBERG, M.M., inzh.

Peat bakelites in the manufacture of sawdust boards. Torf.  
prom. 36 no.8:8-12 '59. (MIRA 13:3)

1. Kalininskiy torfyanyy institut (for Mayzenberg).  
(Peat) (Phenol condensation products)



KUZ'MENKOV, L. N.; KUNIN, A. M.

Removal of water from peat and shale tars by the action of ultrasonic waves. Torf.prom. 37 no.7:19-22 '60. (MIRA 13:11)

1. Leningradskiy metrologicheskij institut imeni D.I.Mendeleyeva (for Kuz'menkov). 2. Kalininskiy torfyanoy institut (for Kunin).  
(Peat--Drying)  
(Ultrasonic waves--Industrial applications)

MAYZENBERG, M.M., inzh.; RAKOVSKIY, V.Ye., doktor tekhn.nauk;  
RIVKINA, Kh.I., kand.tekhn.nauk; KUNIN, A.M., kand.tekhn.nauk

Synthesis of resol resin by the condensation of peat phenols  
with formaldehyde in an oil medium. Torf. prom. 38 no.8:24-  
25 '61. (MIRA 14:12)

1. Kalininskiy torfyancy institut (for Kunin).  
(Phenol condensation products)  
(Peat)

FEDOROV, N.A.; BELYANOVA, Ye.M.; GRIDNEVA, K.I.; RAKOVSKIY, V.Ye.;  
KUNIN, A.M.; YAKOBI, N.S.

Composition and ways of using the liquid products of under-  
ground gasification of coals. Nauch. trudy VNIIPodzemgaza  
no.8:95-103 '62. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut podzemnoy  
gazifikatsii ugley, Kalininskiy torfyanoy institut i Vsesoyuznyy  
nauchno-issledovatel'skiy institut udobreniy i agropochvo-  
vedeniya.

(Coal gasification, Underground--By-products)

KUNIN, A.V.

Favorable conditions of production guarantee success. Transp.  
stroil. 10 no.5:6-7 My '60. (MIRA 13:7)

1. Glavnyy inzhener Kontrol'no-proverochnogo punkta stroitel'stva  
Permatroyput' (for Kunin).  
(Reinforced concrete)

KUNIN, B.A.

Extensive resection of the humerus with fibular substitution. Ortop.  
travm. i protez. 20 no.2:59 F '59. (MIRA 12:12)

1. Iz Tul'skogo garnizonnogo voyennogo gosptalya.  
(HUMERUS, surg.  
extensive resection, fibular substitution (Rus))  
(FIBULA, transpl.  
in extensive resection of humerus (Rus))

KUNIN, B.A., polkovnik med.sluzhby

Diagnosis, treatment, and late results of injuries to the meniscus  
of the knee joint. Voen.-med.zhur. no.2:38-40 F '60.

(KNEE wds. & inj.)

(MIRA 13:5)

KOSTOGRYZOV, V.S., kand. tekhn. nauk; DIKIY, V.A.; ZEMLYANOV, N.G.;  
KUNIN, B.Ya.; MIROSHNICHENKO, M.V.; REMENYAK, V.P.

Method for objective control of the intensity of carbon  
dioxide emission from a tub. Avtom. i prib. no.1:9-12  
Ja-Mr '65. (MIRA 18:8)

KUNIN, B.Z., inzh.

Designing walls and slabs fixed on three sides only with the  
fourth unsupported. Prom.stroi. 38 no.3:60-62 '60.

(MIRA 13:6)

(Walls) (Concrete slabs)



KUNIN, D.; ANTONOVA, T. N.; RAKOVSKIY, V. Ye.

"Chemical and heat processing of peat."

Report submitted for the 2nd International Peat Congress, Leningrad  
15-22 Aug 63.

PETROVSKIY, V., inzh.; KUNIN, F.

Improving the filter centrifuge for the removal of fat from a  
protein-water-fat mixture. Mias. ind. SSSR. 30 no.4:37-38 '59.  
(MIRA 12:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlen-  
nosti (for Petrovskiy).  
(Poltava--Packing houses--Equipment and supplies) (Oils and fats)

KUNIN, G.L.; UGLOV, P.A., tekhnik

Measurement of capacities by means of the MVU-49 bridge.  
Avtom. telem. i sviaz' 3 no.8:24-25 Ag '59. (MIRA 13:2)

1. Starshiy inzhener Laboratorii signalizatsii i svyazi Kuybyshevskoy dorogi (for Kunin). 2. Laboratoriya signalizatsii i svyazi Kuybyshevskoy dorogi (for Uglov).

(Electric measurements) (Bridge circuits)

SOV/124-58-7-7725

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 58 (USSR)

AUTHOR: Kunin, I.A.

TITLE: Contribution to the Hydrodynamic Theory of the Lubrication of a Thrust Bearing (K gidrodinamicheskoy teorii smazki podpyatnika)

PERIODICAL: Izv. vost. fil. AN SSSR, 1957, Nr 4-5, pp 128-137

ABSTRACT: The solution of the problem of the three-dimensional flow of a lubricant with varying viscosity in a thrust bearing is described concisely. The Reynolds equation and the approximated heat-balance equation are discussed, wherein the heat transfer through the walls of the thrust-plate and the thrust-bearing segment is accounted for approximately by a coefficient. In solving the Reynolds equation the author assumes the viscosity of the lubricant to be dependent upon the flow angle in the direction of the segment rotation. In this case there are two possible methods of solving the Reynolds equation. The first method consists in changing over to new variables, in which the equation does not change, but the viscosity is little dependent on the angle. By treating the viscosity as constant, the Poisson equation is

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SOV/124-58-7-7725

Contribution to the Hydrodynamic Theory (cont.)

obtained, the solution of which does not present any difficulties. The newly obtained expression for the pressure distribution is substituted in the heat-balance equation, which serves to determine the value of the parameter entering into the relationship between the viscosity and the angle. The second method assumes that the relationship between the viscosity and the angle is expressed by means of a harmonic function. In this case the product of this function by the pressure also produces the Poisson equation. This method of solution is simpler (but less general) as compared to the first, and it is recommended for the calculation of the thrust bearings. A description of a calculation method is given with pertinent nomograms for a case when the ratio of the outer and the inner diameters of the thrust-bearing is 1.57.

A.I. Golubev

1. Thrust bearings--Lubrication    2. Thrust bearings--Hydrodynamic characteristics    3. Harmonic functions--Applications    4. Mathematics--Applications

Card 2/2

Kunin, I. A.

AUTHOR: Kunin, I. A. (Novosibirsk)

24-10-23/26

TITLE: Solution of the Reynolds equation of the hydrodynamic theory of lubrication in the case of variable viscosity. (Resheniye uravneniya Reynol'dsa gidrodinamicheskoy teorii smazki pri peremennoy vyazkosti).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.10, pp. 109-110 (USSR)

ABSTRACT: A method is described of solving the basic equation of the hydrodynamic theory of lubrication (Reynolds equation) for the case of variable viscosity, which is based on the following idea: the viscosity is approximated by an appropriate coordinate function which depends also on non-determined parameters, which have to be determined from the thermal balance equation, whereby the approximate function is so chosen that the Reynolds equation can be easily solved. The case of a thrust bearing is considered; the solution will be similar for a radial bearing.

There are 2 figures and 1 Slavic reference.

SUBMITTED: May 9, 1957.

AVAILABLE: Library of Congress.  
Card 1/1

KUNIN, I. A., Cand Phys-Math Sci -- (diss) "Hydrodynamic theory of lubrication of ~~the~~ footstep bearing<sup>s</sup>." [Novosibirsk], 1958. 12 pp (Len Polytechnic Inst im M. I. Kalinin, Acad Sci USSR, West-Siberian Affiliate), 110 copies (KL, 18-58, 95)

KUNIN, I.A.

Solving some classes of problems by analogy in an electrolytic tank.  
Izv. Sib. otd. AN SSSR no.7:53-61 '58. (MIRA 11:9)

1. Zapadno-Sibirskiy filial AN SSSR.  
(Electromechanical analogies)



SOV/24-58-10-29/34

AUTHOR: Kunin, I. A. (Novosibirsk)

TITLE: An Approximate Method for the Solution of Boundary Problems for Some Equations of Elliptical Type (Priblizhennyy metod resheniya granichnykh zadach dlya nekotorykh uravneniy ellipticheskogo tipa)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 146-150 (USSR)

ABSTRACT: An account is given of an approximate method of solving boundary problems for equations of elliptical type to which many field problems may be reduced. Their solution is divided into two stages. In the first stage, the original equation with variable coefficients is reduced, using partial solutions of a homogeneous equation, to an equation with almost constant coefficients. In the second stage the latter equation is solved approximately by solving the corresponding equation with constant coefficients. As an example, the problem of lubrication of a bearing in the form of a sector of a circle is considered, the viscosity being variable and obeying a linear

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SOV/24-58-10-29/34

An Approximate Method for the Solution of Boundary Problems for Some Equations of Elliptical Type

law. The solution obtained is in agreement with that obtained by Mitchel (Ref.1) in a special case. There are 3 figures and 2 Soviet references.

SUBMITTED: June 3, 1957.

Card 2/2

SOV/179-59-2-10/40

AUTHOR: Kunin, I. A. (Novosibirsk)

TITLE: On the Hydrodynamic Theory of Flat Film Lubrication with Respect to Viscosity and Temperature (Ploskaya zadacha gidrodinamicheskoy teorii smazki pri uchete zavisimosti vyazkosti ot temperature)

PERIODICAL: Izvestiya Akademii nauk SSSR OTN, Mekhanika i mashinostroyeniye, 1959, Nr 2, pp 70-74 (USSR)

ABSTRACT: In this article lubrication of the bearings of hydro-generators and ships' turbines is considered. The problem is illustrated in Fig 1, where  $ab$  - a segment resting on a point  $O$ ,  $P$  - load,  $cd$  - resisting surface moving with velocity  $U$ . The hydrodynamic equation is given as Eq (1.1) for the conditions (1.2). The equation of thermal equilibrium, in the range of temperatures between 30 to 70°C, is given as Eq (1.3), where  $\mu_1$  - viscosity at the initial temperature,  $t$  - increase of temperature,  $T$  - temperature characterizing the relationship of  $\mu$  and  $t$ . Assuming that most of the heat is taken with the grease, the above equation becomes Eq (1.4) where  $\gamma$  - specific weight of grease,  $c$  - heat conductivity,  $m$  - the coefficient  $\approx 0.9$ .

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## On the Hydrodynamic Theory of Flat Film Lubrication

When no  $t$  is considered the Eq (1.5) can be applied. If the expression of velocity is substituted in the third equation of the expression (1.1) and in the thermal equation (1.5), the Eqs (1.6), (1.7) and (1.8) are obtained, from which Eq (1.9) can be found. As  $\eta$  is not known, Eq (1.6) can be found as follows. The function  $\mu(\xi, \alpha, \mathcal{J})$  for a constant  $\mathcal{J}$  and  $\mu^{(0)}$  and  $\mu^{(4)}$  are defined, then in the region of parameters  $\alpha$  and  $\mathcal{J}$  the functions  $\mu(\xi)$  increase from the value  $\mu_1(1 + \mathcal{J})$ . Thus Eq (2.1) can be defined. Fig 2 represents  $\mu^{(0)}$  and  $\mu^{(4)}$  for  $\mathcal{J} = 1$  and  $\mathcal{J} = 3$  which shows that  $\mu$  is not affected by  $\alpha$ . The function  $\mu_L$  is also given. The viscosity can be calculated from the approximate Eq (2.2) (dotted line) which gives an accuracy of 3%. The characteristic coefficient of the minimum film thickness is defined as Eqs (2.3) and (2.4), and the eccentricity is given by Eq (2.5). The increase of temperature  $\Delta t$  can be found from Eq (2.6). In general, the problem

Card 2/4 is solved when the relations  $\Pi$ ,  $H^2$ ,  $\theta$ ,  $\epsilon$ ,  $\alpha$  and  $\mathcal{J}$  are

SOV/179-59-2-10/40

## On the Hydrodynamic Theory of Flat Film Lubrication

determined. This can be done, for example, as follows. The following are given: dimension of the segment, velocity, initial temperature and type of grease; the following are found: relation of film thickness and increase of temperature at various loads and the eccentricity for their maximum values. Thus  $k$ ,  $T$  and  $\nu$  are known and  $p_m$ ,  $h_0^2$  and  $\Delta t$  are proportional to  $\Pi$ ,  $H^2$  and  $\theta$ . Therefore, it is sufficient to determine  $H^2$  and  $\theta$ . This is illustrated in Figs 3 and 4, where  $\Pi = \alpha = 0$  corresponds to the limit of possible value. The curve  $\alpha = \text{const}$  in Fig 3 is shown as a dotted line. The relation of  $H^2$  and  $\theta$  to  $\Pi$  for  $\varepsilon = \varepsilon_1$  can be determined from Eq (3.1). Similarly, the loss of power due to friction  $N$  can be determined from

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SOV/179-57-2-10/40

## On the Hydrodynamic Theory of Flat Film Lubrication

Eq (3.2). The effect of grease on the characteristics of the bearings (with given  $p_m$ ,  $L$ ,  $U_0$  and initial temperature of the grease) for  $k \sim \mu_i$ ,  $\Pi \sim \tau^{-1}$  can be shown as Eq (3.3) and the initial temperature of the grease, with other parameters constant, can be determined from Eqs (3.4) or (3.5). The relationship of the characteristic of the bearings to the velocity is defined as Eq (3.6). Fig 5 shows the function  $\Pi(\alpha, \theta)$  for  $v = 1$  and  $\lambda = 3$  defined by the method of linear viscosity (a), mean viscosity (c) and from the results of this work (b). It shows that the least error is produced by the method described in this work. There are 5 figures and 2 references, of which 1 is Soviet and 1 English.

SUBMITTED: July 21, 1956.

Card 4/4

67590

SOV/179-59-5-9/41

10.4000

AUTHOR: Kunin, I.A. (Novosibirsk)

TITLE: Contribution to the Theory of the Planetary Vibrator in an Infinite Fluid Medium

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1959, Nr 5, pp 48-52 (USSR)

ABSTRACT: High frequency mechanical vibrators of the planetary type without bearings are finding increasing favour in Russia. The design of certain types of such vibrators is described by L.P.Petrun'kin (Ref 1). The elementary theory of this type of vibrator for compacting a concrete mixture has been given in the same paper. The problem of the generation by the planetary vibrator of sonic waves in an infinite fluid medium is considered by the present author. The mechanical model investigated has a roller rotating under a constant external torque at a constant angular velocity. Simultaneously, the roller rolls without sliding along the internal surface of a hollow cylinder. The latter is so placed in an infinite, viscous, compressible fluid that it can take part in translational motion in a plane at right angles to the cylinder axis.

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67590

SOV/179-59-5-9/41

Contribution to the Theory of the Planetary Vibrator in an  
Infinite Fluid Medium

In the steady state, the centres of gravity of the roller and the cylinder rotate at a certain angular velocity about a certain fixed point. This, in general, lies outside the straight line joining the roller and cylinder centres. Hence the oscillations of the roller and cylinder will have a phase difference other than direct opposition. The forces exerted by the fluid on the cylinder are first found, treating the plane problem only. Under certain conditions, defined by relations between the dimensions of the vibrating bodies, the frequency, speed of sound in the fluid and its kinematic viscosity (conditions which are fulfilled in all cases of practical interests), the fluid outside the vibrating body can be divided into two regions: (a) a thin layer containing vorticity, where the viscous forces are significant and (b) the region of sound waves. In the latter region, a velocity potential exists which satisfies the wave equation. To find this potential, the conditions of emission at infinity and the equality of the normal velocities of the fluid and the body at their boundary must be satisfied. In the boundary

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Contribution to the Theory of the Planetary Vibrator in an  
Infinite Fluid Medium

layer, the tangential component of velocity satisfies an equation of the parabolic type and decays exponentially across the thickness of the layer. Its boundary condition is determined by the step of the tangential components of the velocity of the potential flow. The potential flow is found first. The velocity distribution and the friction force in the boundary layer are then determined. It is noted that the resistance caused by sound radiation is predominant in the range of medium frequency, where the losses caused by friction in the boundary layer are negligible. The power absorption of the vibrator is computed and the conditions for rolling without sliding of the roller in the cylinder are stated. There are 2 figures and 3 Soviet references.

SUBMITTED: May 11, 1959

Card 3/3

4

DYKHNE, A.M. ; KUNIN, I.A.

Determining the surface area of a convex body from its projections.  
Izv. Sib. otd. AN SSSR no.8:3-12 '59. (MIRA 13:2)

I. Institut radiofiziki i elektroniki, Institut gornogo dela Sibirskogo  
otdeleniya AN SSSR.  
(Surfaces)

KUNIN, I.A.

Absolute minimum of one functional. Izv.Sib.otd.AN SSSR  
no.11:90-91 '59. (MIRA 13:4)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR.  
(Functional analysis)

PHASE I BOOK EXPLOITATION 80V/4690

Kunin, Isaak Abramovich

Gidrodinamicheskaya teoriya smazki upornykh podshipnikov (The Hydrodynamic Theory of Lubrication of Thrust Bearings) Novosibirsk, Izd-vo Sibirskogo otd-niya AN SSSR, 1960. 129 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Sibirskoye otdeleniye.

Resp. Ed.: B.V. Sudnishnikov, Candidate of Technical Sciences; Ed.: G.L. Ivanova;  
Tech. Ed.: A.F. Mazarova.

PURPOSE: This book is intended for technical personnel of the machine-building industry and workers of scientific research institutes.

COVERAGE: The book develops the hydrodynamic theory of lubrication of slider thrust bearings for steady operating conditions. Basic equations of this theory are analyzed, and new methods, which give partial consideration to the dependence of viscosity on temperature, are developed for solving these equations. Special attention is given to an investigation of the dependence of bearing characteristics on their design parameters. The suggested calculating method makes

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The Hydrodynamic Theory (Cont.)

SOV/4690

possible the choice of optimum design parameters. Some methods for improving bearing characteristics are elaborated and may be used in the development of the thrust bearing theory. It is mentioned in the foreword that hydrogenerator thrust bearings for very high loads are constructed by the "Elektrosila" and "Uralslektrosapparat" plants. The book was prepared at the request of the NTGZ (Novosibirsk Turbogenerator Plant), and computations and graphs necessary for the determination of characteristic coefficients were made in the calculation office of this plant by E.G. Kaluzhskaya. There are 74 references: 36 Soviet, 27 English, 10 German and 1 French.

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Ch. I. Basic Problems of the Hydrodynamic Theory of Thrust Bearing Lubrication	
1. General picture of phenomena occurring in the lubricant film	5
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