

L 26590-66

ACC NR: AP6011329

0

$$\begin{aligned}
& + \frac{2b^2 q_0 t}{a^2} \sum_{i=1}^{\infty} \left[\int_a^r u \ln \frac{r}{u} J_0(\xi_i u) du \int_0^a [f(r) \cos \omega_i t + \right. \\
& \left. + \frac{g(r)}{\omega_i} \sin \omega_i t] r J_0(\xi_i r) dr \right] \frac{1}{[J_1(\xi_i a)]^2}
\end{aligned}$$

Three special cases are considered. The first assumes a harmonic load

$$Z(r, t) = Q(r) \sin \omega t;$$

the second assumes that a sudden load is applied at $t = 0$, or

$$Z(r, t) = Q \delta(t) \delta(r - r_1);$$

the third considers a single concentrated load of $\bar{Q} = 10$ Nsec/cm applied at the apex of the shell. In each case expressions are obtained for the displacement and stress functions. Orig. art. has: 28 equations.

SUB CODE: 13, 20/ SUBM DATE: 23Jan65/ ORIG REF: 004/ OTH REF: 001

Card 3/3 B.L.G.

KOZAR, Zbigniew; ~~ZAPZYCKI~~, Jan; SEMUTA, Ewa; MARTENOWICZ, Tadeusz;
KASSNER, Jerzy

Histochemical studies on the intestinal phase of trichinosis in mice. Wiad. parazyt. 10 no.4:293-294 '64

1. Pracownia Antropozocnoz Zakładu Parazytologii Polskiej Akademii Nauk, Wrocław; oraz Katedra Parazytologii i Chorob Inwazyjnych i Zakład Histologii Wyższej Szkoły Rolniczej, Wrocław.

SENITSKY, YU.E. (Kuybyshev)

"Transverse impact on a composite bar"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

SENITSKIY, Yu.E. (Kuybyshev)

Free bending vibrations of built-up rods and girders of variable
rigidity under longitudinal loads. Issl. po teor. sooruzh. no.13:
135-144 '64. (MIRA 18:2)

CHIZHICHENKO, Dmitriy Alekseyevich; BAZLOV, Mikhail Nikolayevich; TSYGANOK,
Petr Ivanovich; SENIY, L.A., inzhener, prepodavatel' tekhnika,
retsensent; PETROVA, Ye.A., inzhener, vedushchiy redaktor;
MUKHINA, E.A., tekhnicheskiiy redaktor

[Oil field management] Neftepromyslovoye khoziaistvo. Izd. 2-oe,
perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-
toplivnoi lit-ry, 1957. 240 p. (MIRA 10:7)
(Petroleum industry)

SENJANOVIC, R.

Problem of cleaning of cities. Higijena 14 no.1:57-67 '62.
(REFUSE DISPOSAL)

SENJUK, Ivan

Standards of train stop and train running periods. Zel dop tech 12
no.10: 272 '67.

1. Railroad Operations Section, Usti nad Labem.

SENJIK, Ivan

Evaluation of the change of locomotive crews. Zel dop tech
13 no.1:20 '65.

SENK, J.

Experimental magnetohydrodynamic generator exceeded the one million watt output. Jaderma energie 9 no.11: 346 '63.

S/194/62/000/005/025/157
D256/D308

AUTHORS: Senk, Jaromir, and Folta, Jan

TITLE: Two - and three-position proportional-action magnetic regulators

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-2-111 ya (Czechosl. pat. kl. 42 q, 3/01, 42 q, 5, no. 94657, 15.03.60)

TEXT: It is pointed out that the conventional 2- and 3-position el. regulators are often useless owing to their poor accuracy of regulation. The accuracy can be improved by introducing make- and break operation, the pulse length being proportional to the magnitude of the controlled deviations. The proposed regulator incorporates magnetic control and a pulsing device, and it stands up to the required high standard of accuracy of control. The circuit diagrams of the 2- and 3-position regulators and their static characteristics are given. [Abstractor's note: Complete translation].

Card 1/1

SENK, J.

New safety ideas of the U.S.A. Atomic Commission on location
of nuclear reactors and nuclear power electric plants.
Jaderna energie 8 no.4:131-132 Ap '62.

SENK, J.

Nuclear electric power stations with gas turbines abroad.
Jaderna energie 9 nc.6:206-210 Je '63.

DRAHNY, Milos; SENK, Josef

Technological and economic problems of nuclear engineering.
Jaderna energie 10 no. 5:171,172 My '64.

Dynamic properties of electronic controllers for the A 1
nuclear power station. Ibid.:172

1. Research Institute of Power Engineering, Prague.

YUGOSLAVIA/Diseases of Farm Animals - Diseases Caused by
Viruses and Rickettsiac.

R-3

Abs Jour : Ref Zhur - Biol., No 14, 1958, 64650

Author : Senk, L.

Inst : -

Title : Results of the Pathologico-Anatomic Examination of
Horses from Slovenia Suspected of Being Affected with
Infectious Anemia.

Orig Pub : Veterin. glasnik, 1955, 9, No 12, 850-854.

Abstract : No abstract.

Card 1/1

YUGOSLAVIA
L. S. SENK, Ref Zhur, No 14, 1958, 64650, Author (64650) has stated

Abstract: Diseases of Domestic Animals - Diseases of Horses of High-Production
Dairy Cattle.

Abstract: Veterin. glasnik, No 12, 1955, 850-854.

Abstract: [Human swine modification] Detailed description of one of the
cases of infectious anemia in horses of high production and
dairy cattle. After 10 days respiratory, cerebral, degenerative and
chronic effects were unavailing. At necropsy, the main description
of infectious peritonitis of liver, with fatty infiltration kidneys
also affected to a minor extent. Proposed preventive measures work
well after test failure. Avoid feeding rich feeds in protein and
fat during this period. Give German, Yugoslav references.

1/1

SENK, Miroslav, inz.

The box double-row 27D switchboard. Elektrotechnik 17
no.10:299-301 0 '62.

1. Elektromontazni zavody Praha, n.p., zavod Brno.

CFM. Miroslav. 1971.

New trends in the collecting bar distribution. III test obzor
54 no.1.22-24 Ja '65.

1. Elektromontazni zavody, Prague, Branch Brno. Submitted April
10, 1964.

SENK, Miroslav, inz.

Use of pipes for casing and protection of electric cables.
Elektrotechnik 20 no.4:94-99 Ap '65.

1. Elektromontazni zavody National Enterprise, Branch Brno.

SENK, V.

SENK, V. The Declaration on the Use of Waters of International Rivers; report
by the 47th Meeting of the International Law Association in
Dubrocnik, 1956. p. 642

Vol. 9, no. 11/12, Nov./Dec. 1956
ELEKTROPRIVERDA
TECHNOLOGY
Beograd

So: East European Accession, Vol. 6, No. 3, March 1957

SENK, Vaclav

Chamfering of edges on circular bars by a screw-cutting die head.
Stroj vyr 11 no.10:518 0 '63.

1. Brandyske strojirny, n.p., zavod 2, Senice na Hane.

20

B

Investigation of Burner Coefficient "k" and Heat Flow in a Fuel-Fired Furnace. (In Polish.) R. Dawidowski and T. Senkara. *Prace Badawcze Glownego Instytutu Metalurgii i Odlucznicstwa* (Reports of the Metallurgical and Foundry Research Institute), no. 1. 1949, p. 59-72.

Above coefficient was determined experimentally in presence of 23% excess air. Distribution of temperature of the waste gases and total coefficient of heat transmission to the cold charge were determined. Describes special "calorimetric sounding rod" used. Part played by convection, radiation from the walls, etc., is shown diagrammatically.

ASME S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND LETTERS

3RD LETTER

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100TH LETTER

SENKARA, T.

1586. HEAT TRANSFER TO CHARGE IN INDUSTRIAL FURNACES. Senkara, T.
(Hutnik (Smelter, Katowice), 1952, vol. 19, (5), 159-168). The mechanism
of heat transfer in furnaces is outlined and the radiation of solids, gases,
and luminous flames is described. The possibilities of increasing the heat
transfer coefficient by intermittent carbureting of the fuel gas are
discussed.

I.S.I.

SENKARA, T.

"The Process of Heating Metal Charge in Open-hearth Furnaces." p. 93 (HUTNIK, Vol. 20, No. 3, Mar. 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, October 1953. Unclassified.

SENKARA, T.

D-4

• POLAND/Atomic and Molecular Physics - Heat

Abs Jour : Ref Zhur - Fizika, No 9, 1958, No 20161

Author : Senkara Tadeusz

Inst : ~~Not Given~~

Title : Methods of Measuring and the Determination of the Heat Conducting Coefficient of Graphite and Other Carbon Substances at Temperatures up to 2,000°C.

Orig Pub : Arch. hutn., 1957, 2, No 4, 305-324

Abstract : A critical survey is given of the measurement of the heat conduction λ of graphite and carbon substances at temperatures from 1,000 to 2,000°C. Two methods have been determined for the determination of λ , on the basis of the classical Van Rinsum method. In both methods, the investigated specimen was a tube and the measured quantities were the heat flux and the temperature gradient. The first variant differs from the Van Rinsum method in having a high degree of automatization of the measurements and the elimination of losses from the surface, while the second is different in that the thermal

Card : 1/2

POLAND/Atomic and Molecular Physics - Heat

Abs Jour : Ref Zhur - Fizika, No 9, 1958, No 20161

flux is measured with the aid of a calorimeter and silite-carbon thermocouples are used in a balanced circuit, with the investigated specimen comprising a portion of the thermocouple. The value of λ was measured at an accuracy of 5%, which did not show a tendency to increase with rising temperature. The results are presented in the form of tables and equations. Bibliography, 25 titles.

Card : 2/2

SENKARA, Tadeusz, Dr.Inz.

Burning delay as moderator of temperature distribution in hearth
furnaces. Huta Lenina prace no.9:88-107 My '61.

SENKARA, Tadeusz, zast.prof., dr.inz.

Failure and damage to steam boilers of the Wiesner type. Energetyka
przem 10 no.6:202-204 Je. '62.

1. Akademia Gorniczo-Hutnicza, Krakow.

SENKARA, Tadeusz, doc. dr inż.

Ceramic recuperators with blowing or suction of air? Hutnik
31 no.9:307-308 S '64.

1. School of Mining and Metallurgy, Krakow.

SENKARIUK, Vladimir [Shenkaryuk, Vladimir]; HOFFMANN, Istvan

Some questions relating to the synthesis of methyl borates. Magyar
kem folyoir 67 no.2:49-51 F '62.

1. Gyogyszeripari Kutato Intezet, Budapest.

S/081/62/000/017/054/102
B158/B186

AUTHORS: Senkariuk, Vladimir, Kovács, Elemér, Lázár, Árpád,
Sömogyi, Tibor

TITLE: Production of boron hydrides of alkali metals

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 357-358,
abstract 17K40 (Hungarian patent 148272, June 1, 1961)

TEXT: Hydrogenation of alkali metals is comparatively simple and rapid in mixers running at a small number of revolutions (80-180 r.p.m.) and at comparatively low temperatures (180-220°C), if petroleum distillation products (spindle oil or kerosine) are used as the dispersion medium. In certain cases, the use of emulsifiers may then be omitted. The hydrogenation time is reduced also. Impurities are easily removed and a high purity boron hydride is obtained if the solution formed is evaporated to an alkali concentration of 40-50%. Sodium boron hydride is obtained from a solution of alkali metal hydrides by well-known methods (treating with methylborate). It is washed, neutralized and extracted. [Abstracter's note: Complete translation.] ✓

Card 1/1

MARETIC, Z.; MARETIC-SISUL, N.; RADEJ, I.; SENKER, K.; VINCE, V.; ZUVIC, M.

The epidemic of acute gastroenterocolitis caused by staphylococcal
enterotoxin in 1956 in Pula. Higijena, Beogr. 12 no.2/3:240-250 '60.
(STAPHYLOCOCCAL INFECTIONS epidemiol)
(GASTROENTERITIS microbiol)

SENKEVICH, A. A., MOGILKO, N. V.

Windbreaks, Shelterbelts, etc,

Effect of shelterbelts on the formation of channels. Les. khoz. no. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

SENKEVICH, A.A., kand. sel'skokhozyaystvennykh nauk; KARGOV, V.A., kand.
sel'skokhozyaystvennykh nauk.

Effectiveness of antierosion measures. Zemledelie 6 no.2:57-60 '58.
(Soil conservation) (MIRA 11:3)

SENKEVICH, A.A., inzh.

Use of prestressing in dam construction. *Energokhoz.za rub.*
no.4:35-42 J1-Ag '57. (MIRA 12:11)
(Dams) (Prestressed concrete construction)

SENKEVICH, A.A., inzh.

Combined type of dam on the Oker River. Energokhoz. za Sub.
no.5:07-08 S-0 '57. (MIRA 13:6)
(Oker River--Dama)

SENKEVICH, A.A.

SENKEVICH, A.A., inzh.

Precast concrete penstock for the hydroelectric power plant
at Križ, Yugoslavia (from "Grad evinar," no.1 1957). Elek.sta.
supplement no.6:40-41 N-D '57. (MIRA 11:2)
(Križ, Yuoslavia--Penstocks)
(Precast concrete)

SENKEVICH, A. A.

"The Calculation of Absorption in Gases."

report presented at 6th Sci. Conference on the Application of Ultrasound in the Investigation of Matter, 3-7 Feb 1958, organized by Min. of Education RSFSR and Moscow Oblast Pedagogic Inst. im. N. K. Krupskaya.

46-4.-1-16/23

AUTHOR: Senkevich, A. A.
 TITLE: The Effect of Finiteness of the Amplitude of a
 Sound Source on the Wave Form
 (Vliyaniye konechnosti amplitudy izluchatelya zvuka
 na formu volny.)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol.IV, Nr.1,
 pp.102-103. (USSR)

ABSTRACT: Recently a number of papers (Ref. 1-4) was published,
 on propagation of sound waves of finite amplitude
 which was studied by expansion of hydrodynamic
 equations into series of a certain parameter u_0/c ,
 where u_0 is the amplitude of velocity of the first
 harmonic, and c is the sound velocity. Various
 approximations take into account the effect of non-
 linearity of hydrodynamic equations on propagation
 of harmonic waves. The present letter shows that
 for waves of finite amplitude, apart from dispersion
 and distortions due to non-linearity of the hydro-
 dynamic equations and of the equation of state, it is
 necessary to take into account the effect of finiteness
 of the amplitude of the source when the latter emits

S

Card 2/2

Card 1/2

SENKEVICH, A.A., inzh.

Using "stiff" concrete for concreting dams with large blocks.
Energokhoz.za rub. no.6:41-42 N-D '58. (MIRA 12:4)
(Dams) (Concrete construction)

SENKEVICH, A.A., inzh.

Vlasina hydroelectric power engineering system. (Yugoslavia).
Energokhoz. za rub. no.6:40-44 N-D '59. (MIRA 13:3)
(Yugoslavia--Hydroelectric power plants)

SENKEVICH, Anton Aleksandrovich; MIKHAYLOV, V.N., dotsent; VASILENKO, P.I.,
prof., red.; LYUBCHENKO, B.M., dotsent, inzh., red.; VASILENKO,
P.I., prof., red.; VORONIN, E.P., tekhn.red.

[Using prestressed construction elements in building hydraulic
structures; dams, sluices, pavements, linings, et cetera] Prime-
nenie predvaritel'nogo napriazheniia v konstruktsiakh gidro-
tekhnicheskikh sooruzhenii; plotiny, shliuzy, pokrytiia poverkhnosti
i dr. Pod obshchei red. P.I.Vasilenko. Moskva, Gos.energ.izd-vo.
(Materialy po proektirovaniu gidroenergeticheskikh uzlov. Ser.4.
Gidroelektrostantsii. Gidrotekhnicheskii sooruzheniia. Konstruktsii
i materialy). Pt.2. 1960. 40 p. (MIRA 13:6)

1. Nachal'nik Sektora obmena opytom Otdela tipovogo proyektirovaniya
i tekhninformatsii instituta "Gidroenergoprojekt" (for Mikhaylov).
(Prestressed concrete) (Hydraulic structures)
(Pavements, Concrete)

SERKEVICH, A.A., inzh.

Concrete gravity dams of a light type.
no.1:34-42 Ja-F '60.
(Dams)

Energokhoz.za rub.
(MIRA 13:5)

SENKEVICH, A.A., inzh.

Plan for the Paso Huelches Water-Power Unit on the Rio Colorado
in Argentina. Energokhoz. za rub. no.2:36-37 Mr-Ap '60.

(MIRA 13:6)

(Rio Colorado, Argentine Republic--Hydroelectric power stations)

SENKEVICH, A.A., inzh.

Gantry cranes at hydroelectric power stations; some data from the U.S.A.
and Canada. Energokhoz. za rub. no.4:41-43 J1-Ag'60. (MIRA 13:10)
(Hydroelectric power stations--Equipment and supplies)
(Cranes, derricks, etc.)

SENKEVICH, A.A., inzh.; IL'IN, A.I., inzh.

Rock-fill dams with decks made of substitute materials. *Znergokhoz.*
za rub. no.4:32-40 J1-Ag'60. (MIRA 13:10)

(Dams)

KATOLIKOV, V.Ye., inzh.; SEN'KEVICH, A.A., inzh.

Electric drives and automatic control systems of mine hoisting
machinery. Vest. elektroprom. 32 no.10:24-29 0 '61. (MIRA 14:9)
(Electric driving) (Hoisting machinery)
(Electricity in mining)

L 43748-65

ACCESSION NR: AR5009486

S/0124/65/000/003/B128/B128

SOURCE: Ref. zh. Mekhanika, Abs. 3B773

AUTHOR: Baydedayev, A.; Senkevich, A.A.

TITLE: The calculation of periods of rotational relaxation in molecular hydrogen

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 17. M., 1963, 207-212

TOPIC TAGS: molecular hydrogen, rotational relaxation period, Boltzmann equation, gas kinetics

TRANSLATION: Quantum-mechanical calculations of the effective crosssection of inelastic collisions for H_2 are employed to evaluate periods of rotational relaxation in H_2 on the basis of Boltzmann's gas-kinetic equations. The results obtained agree with the data of ultraacoustic measurements.

SUB CODE: ME, NP

ENCL: 00

Card 1/1 *mpj*

SENKEVICH, Aleksandr Aleksandrovich, kand. sel'khoz. nauk;
LEONOVA, T.S., red.; RAKITIN, I.T., tekhn. red.

[Green shelterbelts; shelterbelt afforestation in our
country and abroad] Zelenye zaslory; zashchitnoe lesorazvedenie u nas i za rubezhom. Moskva, Izd-vo "Znanie,"
1963. 38 p. (Novoe v zhizni, nauke, tekhnike. V Serii: Sel'skoe khoziaistvo, no.20) (MIRA 16:12)
(Windbreaks, shelterbelts, etc.)

L 65273-65 EWT(1)

ACCESSION NR: AR5014406

UR/0058/65/000/004/E004/E004

SOURCE: Ref. zh. Fizika, Abs. 4E22

AUTHOR: Baydedayev, A.; Senkevich, A. A.

TITLE: Vibrational relaxation in a monatomic gas mixture

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18. M., 1963, 73-79

TOPIC TAGS: vibration relaxation, gas relaxation

TRANSLATION: Relaxation equations are derived for vibrational energy in a mixture of monatomic gases. Characteristic times are evaluated which are associated with simple excitation and with simple and complex vibrational quantum exchange. These relaxation equations are also written in the acoustic approximation.

SUB CODE: NP

ENCL: 00

Card 1/1

L 61333-65 EWT(d)/T IJP(c)
ACCESSION NR: AR5015972

UR/0058/65/000/005/B006/B006

SOURCE: Ref. zh. Fizika, Abs. 5B65

AUTHORS: Golov, A. N.; Senkevich, A. A.

TITLE: Use of variational principle to find a statistical distribution function

CITED SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 142, 1964, 179-182

TOPIC TAGS: quantum mechanics, statistical physics, statistical distribution, variational method

TRANSLATION: It is shown that classical distributions of statistical physics are extremal with respect to the possible stationary distributions, and can be obtained with the aid of a variational formalism in generalized coordinates, provided certain requirements are satisfied by the properties of the function and the configuration space.

SUB CODE: GP

ENCL: 00

dym
Card 1/1

ACC NR: AR6013645

SOURCE CODE: UR/0058/65/000/010/E002/E002

AUTHOR: Senkevich, A. A.

TITLE: On the dynamic equations of state for an ideal gas

SOURCE: Ref. zh. Fizika, Abs. 10E12

REF SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 147, 1964, 175-180

TOPIC TAGS: ideal gas, equation of state, adiabatic process

TRANSLATION: Starting with the nonequilibrium equation of state for an ideal gas

$$F(p, V, T, x, t) = 0,$$

phenomenological considerations were used to obtain the equation of the nonequilibrium states

$$pV^\gamma = \text{const.}$$

The index γ of the nonequilibrium adiabatic curve is determined.

SUB CODE: 20

Card 1/1

BAYDEYEV, A.; SENKEVICH, A.A.

Theory of bimolecular reactions. Zhur. fiz. khim. 38 no.10:
2448-2451 0 '64. (MIRA 18:2)

1. Moskovskiy oblastnoy pedagogicheskiy institut.

L 59007-65 EWT(1) IJP(c)

ACCESSION NR: AR5016009

UR/0058/65/000/005/H086/H086

SOURCE: Ref. zh. Fizika, Abs. 5Zh575

AUTHOR: Senkevich, A. A.

10
B
A

TITLE: Some remarks concerning the existing theories of molecular acoustics of small amplitudes

CITED SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 142, 1964, 149-158

TOPIC TAGS: molecular acoustics, acoustical theory, sound propagation, sound absorption, isothermal propagation

TRANSLATION: The author notices many shortcomings in the existing theories of sound propagation. In his opinion it is impossible, for example, to express the sound velocity c and the absorption α in terms of parameters that are determined by non-acoustical methods, since the conditions in the sound wave may be different. In the formula for the coefficient of absorption of longitudinal waves, $\alpha = (\omega^2/\rho c^3)(\lambda + 2\eta)$, the author proposes to define as the bulk viscosity the quantity λ (and not $\lambda + 2\eta/3$), wherein η is not the ordinary shear viscosity. The author regards it as incorrect to state that sound propagation should become iso-

Card 1/2

dm
Card 2/2

L 59414-65 EWT(1) IJP(c)

ACCESSION NR: AR5015980

UR/0058/65/000/005/E004/E004

SOURCE: Ref. zh. Fizika, Abs. 5E23

AUTHORS: Baydedayev, A.; Senkevich, A. A.

TITLE: On vibrational relaxation in a mixture of polyatomic molecules

CITED SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 142, 1964, 159-168

TOPIC TAGS: polyatomic molecule, vibrational relaxation, Boltzmann equation, transition probability, kinetic equation, vibrational transition

TRANSLATION: Using a generalized Boltzmann equation with account of additional conditions for the transition probabilities, the authors obtain generalized reaction kinetic equations describing vibrational transitions in a multicomponent mixture of polyatomic gases. In the general case, the generalized kinetic equations describe simultaneously processes of single-quantum excitation and de-activation, exchange of vibrational quanta, and two-quantum excitation and de-activation of both molecules.

SUB CODE: GP

ENCL: 00

kc
Card 1/1

L 59214-65 EWT(d)/T LJP(c)

ACCESSION NR: AR5017533

UR/0058/65/000/006/B005/B005

SOURCE: Ref. zh. Fizika, Abs. 6B54

AUTHORS: Golov, A. N.; Senkevich, A. A.

TITLE: Statistical distributions as properties of generalized coordinates

CITED SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 142, 1964, 169-178

TOPIC TAGS: statistical distribution, generalized coordinate, probability theory, statistical theory, ergodic theorem, Liouville theorem, phase space

TRANSLATION: Connections are determined between two classes of hypotheses made in the construction of a statistical theory. The first class includes postulates of probability character, namely a priori assumptions concerning probabilities, the ergodic hypothesis, the Liouville theorem, the assumption that it is possible to break down the system into parts which are "sufficiently small" and at the same time "sufficiently large," etc. The second class includes assumptions concerning the geometrical structure of phase space.

SUB CODE: MA, GP

ENCL: 00

dm
Card 1/1

SENKEVICH, A.A.

24(1) P. 3 PHASE I BOOK EXPLOITATION SOV/3352

Vserossiyskaya konferentsiya professorov i prepodavateley pedagogicheskikh institutov.

Primeneniye ul'traakustiki k issledovaniyu veshchestva; trudy konferentsii, vyp. 8 (Application of Ultrasonics in the Study of Matter; Transactions of a Conference, Nr. 8) Moscow, Izd. MOPI, 1959. 170 p. 1,000 copies printed.

Tech. Ed.: S. P. Zhitov.

PURPOSE: The book is intended for physicists, particularly those specializing in the field of ultrasonics.

COVERAGE: This is a collection of 12 articles dealing with problems of acoustics, ultrasonics, and molecular physics. References are given at the end of each article.

TABLE OF CONTENTS:

Nozdrev, V. F. Some New Problems in the Study of the Critical State by Acoustical Methods (Results of the International Colloquy in Paris, 1957) 3
Card 1/4

Application of Ultrasonics (Cont.)

SOV/3352

- Predvoditelev, A. S. Dispersion of Acoustic Waves in Rarefied Gases. Article I. 19
- Zipir, A. D., and V. F. Yakovlev. Pulse Method for Multiple Transformation of an Ultrasonic Signal in the Investigation of Liquid Media 63
- Ilgunas, V., and E. Yaronis. On the Theory of Interferometers With Variable and Constant Length 67
- Trelin, Yu. S. Some Results of Measurement of Ultrasonic Velocity in Gases by the Pulse Method 75
- Volarovich, M. P., and D. B. Balashov. Investigation of Ultrasonic Velocity in Nitrogen Under Pressures up to 1050 kg/sq cm 83
- Akhmetzyanov, K. G., and M. G. Shirkevich. Ultrasonic Velocity in Compressed Vapors of Ethyl Alcohol and Determination of Heat Capacities C_p and C_v 93

Card 2/4

Application of Ultrasonics (Cont.)	SOV/3352	
Perepechko, I. I. Ultrasonic Propagation in Rarefied Gases		103
Kuchera, F. On Some Conditions for Applicability of Raoult's Law for Solutions		115
Shilyayev, A. S., and B. B. Kudryavtsev, Ultrasonic Velocity and Surface Tension in Ternary Liquid Systems		121
Bessonov, M. B. Measuring Ultrasonic Velocity and Absorption in Solutions at High Temperatures		137
Senkevich, A. A. Propagation and Absorption of Ultrasonic Waves in Gases and Liquids in the Light of Molecular-Kinetic Conceptions		147
Rotkhardt, L. Investigation of the Internal Structure of Silica Gel by Means of Ultrasonics		161

INFORMATION:

Card 3/4

• Application of Ultrasonics (Cont.)

sqv/3352

• Kudryavtsev, B. B. Fifth Seminar on Acoustics in Olsztyn

169

AVAILABLE: Library of Congress

Card 4/4

TM/mg
3-28-60

Senkevich, A. A.

Excerpts from the Program and Information Circular, reports to be submitted for the Third Intl. Congress on Acoustics, IUTAF, Stuttgart, GFR, 1-8 Sep. 1960.

18 Sep 59

USSR (cont'd)

- KURKACHEN, B. B., and BALZAN, S. A., Laboratory for Molecular Acoustics, Moscow Oblect Institute for Pedagogics - "The relationship between viscosity and velocity of sound in a liquid"
- MADREV, V. I., Institute of Acoustics, Bulgarian Academy of Sciences, Sofia - "Study of sound dispersion in solid bodies, plates, and shells by means of an optical process in a dark field"
- MALYUZHENKO, G. D., Acoustics Institute, USSR Academy of Sciences, Moscow - (1) "The Sommerfeld integrals and curve tails in cuspidal areas"; (2) "Development of curve phenomena presentations"
- MORILLOV, L. G., Leningrad Electrical Engineering Institute Ia. V. I. Myayov-Lenin - "Absorption of ultrashort waves with frequencies of up to 1000 MHz in crystals"
- MOUDRIKH, E. E., and ROMARENKO, E. V., Acoustics Institute, USSR Academy of Sciences, Moscow - "The propagation of spherical and cylindrical waves of finite amplitude"
- ROZDOLNY, V. I., Laboratory for Molecular Acoustics, Moscow Oblect Institute for Pedagogics - "Physical bases for the technical application of molecular acoustics of small amplitudes"
- ROZDOLNY, V. I., HELIKOVA, L. O., and BELIKOVY, B. A. - "Study of supersonic wave absorption in the esters of acetic acid at high frequencies"
- ROZDOLNY, V. I., KAL'YANOV, B. K., and SHREINIKOV, M. O. - "Studies of supersonic wave absorption in liquids at high temperatures and pressures"
- ROZDOLNY, V. I., MOSHEV, E. I., and GORBUKOV, M. A. - "Study of the system of liquid-proof bodies by means of ultra-acoustical methods"
- ROZDOLNY, V. I., YAKOVLEV, V. I., PEZDEKHO, Yu. G., in collaboration with A. A. - "Dispersion of ultrasonic sound in gases"
- POZDANVA, A. L., Acoustics Institute, USSR Academy of Sciences, Moscow - "Absorption of ultimate amplitude sound waves in relaxing media"
- ROZDOLNY, V. I., Acoustics Institute, USSR Academy of Sciences, Moscow - "Statistical properties of broad-casting signals"
- RYKOVA, E. A., and FROLOV, D. P., Acoustics Institute, USSR Academy of Sciences, Moscow - "
- ROZDOLNY, V. I., Acoustics Institute, USSR Academy of Sciences, Moscow - "Studies of the physical processes in industrial applications of supersonic sound"
- SAMOILOVA, I. E., Sechenov Institute of Evolutionary Physiology, USSR Academy of Sciences, Leningrad - "Researching marking of short tone signals"
- SEITZ, H., and HIRASHIKI, Yu. N., Laboratory for Occupational Health, Institute for Labor Protection, Leningrad - "The Soviet system of standards for industrial noise and the Soviet Union's experiences with the system"
- SHIRY, D., Szekesfehervar - "Contribution to the theory of sound radiation"
- SHIL'D, J., Budapest - "Ultrasonic intensity measurement by compensated calorimeter"
- SHIRY, D., OTLAKI, A., and SZIN, S., Chair of Physics, Higher School of Agriculture, Glastyn - "Concerning a new acoustic method of determining inter-mediate molecular forces in liquids and liquid mixtures"
- JACOB, R. P., Institute for Theoretical Physics, University of Borstock - "The significance of sound velocity measurements for the physics of ternary solutions"
- "Generation of sound by spark discharges in water"

Hungary

Poland

Germany (Democratic Republic)

Excerpts from the Program and Information Circular, reports to be submitted for the Third Intl. Congress on Acoustics, IUTAF, Stuttgart, GFR, 1-8 Sep. 1960.

SENKEVICH, A. A.

PHASE I BOOK EXCITATION 809/5207

Vserossiyskaya konferentsiya professorov i propodavateley pedagogicheskikh institutov
 Primeneniye ultrazvukov k issledovaniyu veshchestva (Utilization of Ultrasonics
 for the Investigation of Matter) Moscow, Izd. MFTI, 1960. 287 p. 1,000 copies
 printed. (Series: Its Trudy, v. 9. 11)

Ed. (title page): V.F. Mozdrev, Professor and B.B. Kudryavtsev, Professor.

PURPOSE: This collection of articles is intended for physicists specializing
 in the physics of ultrasound.

COVERAGE: The collection of articles constitutes the transactions of the VII Con-
 ference on the Applications of Ultrasonics to the Study of Materials, which was
 held at the Moscow Oblast Pedagogical Institute named N.K. Krupskaya. Individual
 articles of the collection discuss various problems in the wave mechanics of
 ultrasound, the absorption and the propagation mechanics of ultrasonic waves in
 various media, the operating principle and design of generators and receivers of
 ultrasonic waves, the speed of sound and methods for its determination. Other
 articles deal with the applications of ultrasonics to investigations of the
 properties of materials. No formalities are mentioned. References accompany
 the articles.

- Malye, A.M., and V.F. Yakovlev [Moscow Oblast Pedagogical Institute named
N.K. Krupskaya]. Elementary Theory of the Crystal Transformer Operating as
a Receiver 89
- Mal'nev, B.I. [Sobornyye pedagogicheskoye Pedagogical Institute]. Some
Problems of the Theory of Crystal Transformers 81
- Kudryavtsev, B.B. [Moscow Oblast Pedagogical Institute named N.K. Krupskaya].
Calculation of Speeds of Sound in Binary Mixtures 63
- Senkevich, A.A. [Moscow Oblast Pedagogical Institute named N.K. Krupskaya].
Theory of Molecular Acoustics 71
- Olinakhy, A.M. [Moscow Oblast Pedagogical Institute named N.K. Krupskaya].
Nature of the Stokes Factor 85
- Kazaryants, A.A. [Moskviskiy gosudarstvennyy universitet imeni I.I.
Mechnikovskaya State University named I.I. Mechnikov]. Hydrodynamic
Theory of the Propagation of Sound Waves in a Liquid. 95
- Kocera, F., and A. Dylski [Department of Physics of the Agricultural
College of Olstoty]. Verification of the Interpretation of Acoustic Con-
centration Curves 99
- Zipir, A.D., and V.F. Yakovlev [Moscow Oblast Pedagogical Institute named
N.K. Krupskaya]. Experimental Basis of Methods for Using Multiple Echo-
Impulses to Investigate Liquid Media at Low Frequencies 107
- Lushnikov, G.A., and P.K. Onuchukov [Institut metallurgii AN SSSR - Institute
of Metallurgy of the Academy of Sciences USSR]. Using the Electron-Acoustic
Transformer for Investigating the Homogeneity of Metals 123
- Bostorany, B.M. [Orlovskiy pedagogicheskiy institut-Orlov Pedagogical
Institute]. Changing the Natural Frequency of Magnetostriction Vibrators
With the Aid of Additional Masses 135
- Sul'yamkov, V.V. [Tumov Pedagogical Institute]. The Electrostriction of
a Liquid as a Source of Ultrasonic Oscillations 139
- Volynskiy, K.P., and Ye.I. Bayuk [Institut fiziki Zemli AN SSSR.
Institute of Physics of the Earth AS USSR]. Investigation of Elastic
Properties of Rock Samples Under All-Around Pressures of Up to 1000 kg/cm² 147
- Kustova, A.V., and B.B. Kudryavtsev [Moscow Oblast Pedagogical Institute
named N.K. Krupskaya]. Propagation of Sound in Disperse Media 155

Card 3/7

(11)

S/139/60/000/005/010/031
E031/E113

AUTHOR:

Senkevich, A.A.

TITLE:

On the Problem of the Stokes' Coefficient of Absorption
of Sound γ

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,
1960, No. 5, pp 60-63

TEXT: If we take into account the second coefficient of
viscosity, λ , and write $\xi = \lambda + 2/3 \eta$, where η is the
dynamical viscosity, the expression for the absorption coefficient

$$\alpha = \frac{\omega^2}{2\rho c^3} \left(\frac{4}{3} \eta + \xi \right) \quad (c \text{ is the velocity of sound}). (2)$$

It is argued that it is more correct to write this as

$$\alpha = \frac{\omega^2}{2\rho c^3} (2\eta + \lambda) \quad (3)$$

and expand λ as a sum of terms of the form $\lambda/1 + \omega^2 \tau^2$, rather
than the former expression in which ξ is expanded as a sum of

Card 1/3

S/139/60/000/005/010/031
E031/E113

On the Problem of the Stokes' Coefficient of Absorption of Sound terms of the form $\xi/1 + \omega^2 \tau^2$. The nature of the stress tensor is next considered and it is argued that in the expressions for P_{xx} , P_{yy} , P_{zz} the coefficient μ should be replaced by another coefficient $\mu' \neq \mu$. This leads to the expression

$$\alpha = \frac{\omega^2}{2\rho c^3} (2\mu' + \lambda). \quad (8)$$

for the absorption coefficient. Thus the dynamical viscosity does not appear. These considerations apply to the case when there is a longitudinal velocity gradient. Since a longitudinal velocity gradient is always accompanied in a sound wave by a change in the volume, the undetermined coefficients μ' and λ in (8) are in practice always present together. Thus, in principle, $(2\mu' + \lambda)$ can be replaced by any combination with an unknown coefficient, including $(4/3\eta + \xi)$, if the quantity ξ is undetermined.

Card 2/3

S/139/60/000/005/010/031

E031/E113

On the Problem of the Stokes' Coefficient of Absorption of Sound
However, for the case of a sound wave the coefficients $\frac{4}{3}\eta$
and ξ do not have a definite physical meaning.

There are 11 references: 1 German, 1 Swiss, 2 English and
7 Soviet.

ASSOCIATION: Moskovskiy oblpedinstitut imeni N.K. Krupskoy
(Moscow District Pedagogic Institute imeni
N.K. Krupskaya)

SUBMITTED: August 3, 1959

Card 3/3

SOV/46-5-3-27/32

24(1)

AUTHOR: Senkevich, A.A.

TITLE: A Reply to A.A. Tuzhilin's Letter to the Editor (Otvét na pis'mo v redaktsiyu A.A. Tuzhilina)

PERIODICAL: Akusticheskiy zhurnal, 1959, Vol 5, Nr 3, pp 381-382 (USSR)

ABSTRACT: Answering A.A. Tuzhilin's criticisms (Ref 1) of his note (Ref 2), the present author (Senkevich) points out that he did not consider the problem of propagation of sound in the second acoustic approximation, but intended to show that there is a further source of non-linearity due to the finite amplitude of the wave produced by a source, and this non-linearity affects terms of the second order of smallness. There are 3 Soviet references.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut im. N.K. Krupskoy (Moscow Regional Pedagogical Institute imeni N.K. Krupskaya)

SUBMITTED: February 9, 1959

Card 1/1

NOZDREV, Vasilii Fedorovich; SENKEVICH, Arkadiy Aleksandrovich;
PERKOVSKAYA, G.Ye., red.

[Statistical physics course] Kurs statisticheskoi fiziki.
Moskva, Vysshaya shkola, 1965. 287 p. (MIRA 18:7)

L 32988-66 EWT(1) IJP(c) WW

SOURCE CODE: UR/0058/65/000/011/H057/H057

ACC NR: AR6016263

46
B

AUTHOR: Senkevich, A. A.

TITLE: Calculation of the speed of sound in gases at high values of the parameter v/p

SOURCE: Ref. zh. Fizika, Abs. 11Zh394

REF SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 20, M., 1964, 165-171

TOPIC TAGS: acoustic speed, acoustic wave, acoustic propagation, adiabatic process

ABSTRACT: The author considers the Poisson adiabatic equation as generalized to the case of non-equilibrium and nonstationary processes in a sound wave. The form of the Poisson equation does not change in this case, but the adiabatic exponent should be defined with allowance for "switching off" several degrees of freedom (first vibrational, then rotational, and finally two translational, connected with directions perpendicular and parallel to the direction of the action). The speed of sound is calculated with the usual formula. The dispersion is also determined.
L. Zarembo [Translation of abstract]

SUB CODE: 20/

Card 1/1 BK

SENKEVICH, A.I., kand.med.nauk; SERGEYEV, Ye.P.,kand.med.nauk

Two methods for the rapid determination of the CO₂ content of the
air. Gig.i san. no. 10:58-61 0 '60. (MIRA 13:12)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.
Kirova. (AIR POLLUTION) (CARBON DIOXIDE)

17 20 00

27.2000

AUTHORS:

4212

Sergeyev, Ye.P., Lieutenant-Colonel, Medical Corps,
Senkevich, A.I., Major, Medical Corps, and Yeremeyev,
N.N., Lieutenant-Colonel, Medical Corps

3255B
S/177/61/C00/006/003/003
D298/D305

TITLE:

On the operating routine of a ship's ventilation

PERIODICAL:

Voyenno-meditsinskiy zhurnal, no. 6, 1961, 61-65

TEXT: The authors studied various specially created microclimatic conditions with three types of ship's ventilation system (normal, filter ventilation, and hermetization with air recirculation in closed premises) to determine those parameters of the air medium, under which ship's specialists preserved their work capacity. G.B. Smolyanskiy assisted in some of the ship tests. The personnel's work capacity was judged in the physiological shifts in the body in the course of a 4-hour watch. Physiological shifts were assessed from changes in attention, as determined with Ivanov-Smolyanskiy letter tables and, for radio operators, a standard radiogram. Changes in respiration and pulse rate, weight

Card 1/3

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S/177/61/000/006/003/003
D298/D305

On the operating ...

and body temperature were also determined. During the tests personnel were questioned as to their heat sensations and how they felt generally. Air parameters taken into account were: Temperature, humidity and mobility of the air, heat radiation, the content in the air of carbon dioxide, ammonium and ammonium compounds excreted by the personnel. The results are presented in tabular form. From them optimum parameters for ensuring the work capacity of personnel throughout a watch can be selected for each type of ship's ventilation. A detailed account of six series of tests conducted by the authors is given. Analysis of the results shows that with proper microclimate, sailors preserve their work capacity throughout a 4-hour watch, despite the development of a certain degree of inhibition in the central nervous system. For hermetic ventilation of unheated battle stations the authors recommend the parameters pertaining in tests No. 1 and 3. These parameters averaged: Air temperature 26°C, relative humidity not more than 85%, air movement 0.2 meters/sec., resultant temperature 25°C, CO₂ content by the end of the watch up to 1%. These parameters are recommended only for the same conditions

Card 2/3

BRUSKIN, D.E., dotsent. Prinimali uchastiye: SENILOV, G.N., dotsent;
BASOVA, B.K., dotsent; BOKSHITSKIY, L.V., prepodavatel'; LUGOVOY,
G.F., prepodavatel'; CHUMAKOV, N.M., prepodavatel'. SENKEVICH,
A.M., dotsent, red.; CHAROV, A.D., tekhn.red.

[Electric equipment of airplanes] Elektrooborudovanie samoletov.
Moskva, Gos.energ.izd-vo, 1948. 464 p. (MIRA 12:6)

1. Kafedra inzhenerno-aviatsionnoy sluzhby Moskovskogo ordena
Lenina energeticheskogo instituta im. V.M.Molotova (for all
except Senkevich, Charov).
(Airplanes--Electric equipment)

SENKEVICH, A.M.

AKIMOV, Valentin Nikolayevich [deceased]; APAROV, Boris Petrovich, [deceased]; BALAGUROV, Vladimir Aleksandrovich; GALTYEV, Fedor Fedorovich; KOROBAH, Nikolay Timofeyevich; LARIONOV, Andrey Nikolayevich, redaktor; MASTYAYEV, Nikolay Zosimovich; SENKEVICH, A.M., redaktor; SKVORTSOV, I.N., tekhnicheskiy redaktor.

[Principles for the electric equipment of airplanes and automobiles] Osnovy elektrooborudovaniia samoletov i avtomashin. Pod red. A.N.Larionova. Moskva, Gos.energ.izd-vo, 1955. 384 p. (MLRA 8:12)

1. Chlen korrespondent AN SSSR (for Larionov)
(Airplanes--Electric equipment) (Automobiles--Electric Equipment)

KULEBAKIN, Viktor Sergeyevich; MOROZOVSKIY, Vladimir Tikhonovich; SINDEYEV, Igor' Mikhaylovich; LARIONOV, A.N., professor; SENKEVICH, A.M., kandidat tekhnicheskikh nauk, redaktor; BOGOMOLOVA, M.F., izdatel'skiy redaktor; ZUDAKIN, I.M., tekhnicheskii redaktor

[Production, transformation and distribution of electric power in aircraft] Proizvodstvo, preobrazovanie i raspredelenie elektricheskoi energii na samoletakh. Moskva, Gos.izd-vo obor. promyshl., 1956. 479 p.
(MLRA 9:11)

1. Zaveduyushchii kafedroy elektrooborudovaniya samoletov i avtomobiley Moskovskogo energeticheskogo instituta imeni Molotova, chlen-korrespondent Akademii nauk SSSR (for Larionov)
(Electricity in aeronautics)

KULEBAKIN, Viktor Sergeyevich; NAGORSKIY, Valentin Dmitriyevich; POPOV, Yu.A., kand.tekhn.nauk, dotsent, retsenzent; LARIONOV, A.N., prof., retsenzent; SENKEVICH, A.M., dotsent, kand.tekhn.nauk, red.; TUBYANSKAYA, F.G., izdat. red.; ROZHIN, V.P., tekhn.red.

[Electric drives for airplane power units and mechanisms] Elektroprivod samoletnykh agregatov i mekhanizmov. Moskva, Gos. izd-vo obor. promyshl., 1958. 386 p. (MIRA 12:1)

1. Zaveduyushchiy kafedroy aviatsionnogo elektrooborudovaniya Moskovskogo aviatsionnogo instituta imeni Ordzhonikidze (for Popov).
2. Chlen-korrespondent AN SSSR. Zaveduyushchiy kafedroy elektrooborudovaniya samoletov i avtomobiley Moskovskogo energeticheskogo instituta (for Larionov).

(Electric drive) (Airplanes--Electric equipment)

SENKEVICH, A.M.

New control-calculation for the magnetic system of a magneto-
electric instrument having its magnet inside the frame. Inform.-
tekh. sber. MEP no.8:9-15 '58. (MIRA 12:1)

1. Moskovskiy energeticheskiy institut.
(Electric instruments)

KULEBAKIN, Viktor Sergeyevich; SINDEYEV, Igor' Mikhaylovich; DAVIDOV, Pavel Davidovich; FEDOROV, Boris Fedorovich [deceased]; ZAVALLISHIN, D.A., prof., doktor tekhn.nauk, zasluzhennyy deyatel' nauki i tekhniki RSFSR, retsenzent; SENKEVICH, A.M., dotsent, kand.tekhn.nauk, red.; MOROZOVA, P.B., izdat.red.; ORESHKINA, V.I., tekhn.red.

[Electric systems of ignition, heating, and lighting of airplanes]
Elektricheskie sistemy zazhiganiya obogreva i osveshcheniya samoletov. Moskva, Gos.nauchno-tekhn.izd-vo Oborongiz, 1960. 372 p.
(MIRA 13:5)

(Airplanes--Electric equipment)

BALAGUROV, Vladimir Aleksandrovich; GALTEYEV, Fedor Fedorovich;
GORDON, Andrey Vladimirovich; LARIONOV, Andrey Nikolayevich;
SOTSKOV, B.S., retsenzent; ~~SENKOVICH, A.M., kand. tekhn. nauk.,~~
red.; MOROZOVA, P.B., red. izd-va; ROZHIN, V.P., tekhn. red.

[Design of electric devices for aircraft electric equipment] Pro-
ektirovanie elektricheskikh apparatov aviatsionnogo elektro-
oborudovaniia. [By] V.A.Balagurov i dr. Pod red. A.N.Larionova.
Moskva, Oborongiz, 1962. 515 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Larionov, Sotkov).
(Airplanes--Electric equipment)

L 5802-06 LIT(1)/INT(1)/L2A(1)/L2B(1) MF(1) JL

ACC NR: AR5018684

SOURCE CODE: UR/0196/65/000/007/L023/L023

AUTHOR: Larionov, A.N.; Balagurov, V.A.; Galteyev, F.F.; Mastyayev, N.Z.;
Morozov, V.G.; Senkevich, A.M.

ORG: none

TITLE: ^{P/} Use of the newest permanent magnets in electric motors and
electric equipment for aircraft and automobiles ₂₁

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 7L125

REF SOURCE: Sb. dokl. na Vses. soveshchanii po litym splavam dlya
postoyan. magnitov, 1962. Saratov, 1964, 187-198

TOPIC TAGS: magnet, permanent magnet material, electric generator
unit, aircraft electric power equipment, *electric motor*

TRANSLATION: Use of new material for cast permanent magnets (PM) with
a directional structure and a magnetic power of $7-9.5 \cdot 10^6$ gauss-oersted
opens up great possibilities for their use in electric motors and
equipment used in aircraft and automobile engineering. For heavy-duty
generators, a PM with considerable H_c is needed. Work has been done
on a PM with $H_c = 1,250$ oersted and $B_r = 7,500$ gauss. Of special importan-
ce are the platinum-cobalt alloys with $H_c \gg 5,000$ oersted and

Card 1/2

UDC: 629.11.066:629.13.066:621.318.2

L 25862-66

ACC NR: AR5018684

$B_r = 6,000-7,000$ gauss. However, because of high cost, the latter can be used only for very special generators. Calculations have shown that such a PM generator, with 200 kv, 30,000 spm and 2,000 cps, may weigh 65 kg. A study was made of generators with spurshaped, star-shaped and prismatic PMs. The system with starshaped rotors proved to be unsuitable for generators > 7.5 kva. A generator was designed with 16 kw, 40 cps, 800 rpm with a prismatic shape PM and massive polar sockets of a complex shape, allowing the regulation of the magnetic flow in the generator gap by means of a stationary circular electric magnet and realizing a contactless regulation of the generator voltage. The most usual methods for the stabilization of PM generator voltages are cubic content, throttle choke and magnetic bias of the edge. Along with the synchronous PM motors, low-power hysteresis motors are also gaining ground. For these motors, special magnetic materials have been developed, such as vikalloy. The operational conditions of PM electric motors require a study of the effect of high temperature on the properties of a PM. . V. Morozov

SUB CODE: 09/

SUBM DATE: none

Card 2/2 LW

SOV/71-59-3-2/23

5(3)

AUTHOR: Senkevich, A.S.

TITLE: Socialist Commitments of the Collective of the Petrovsk Alcohol Plant (Sotsialisticheskiye obyazatel'stva kollektiva Petrovskogo spirtovogo zavoda)

PERIODICAL: Spirtovaya promyshlennost', 1959, Nr 3, pp 4-5 (USSR)

ABSTRACT: Among the achievements of the Petrovskiy spirtovyy zavod (Petrovsk Alcohol Plant) are mentioned in the article the process of continuous fermentation of starchy raw material, the process of continuous cooking resulting in increased alcohol production, the installation of cyclone firing for the steam boiler with a heating surface of 500 m² adapted for using peat as fuel. More efficient use is scheduled to be made of the draff as fodder for local cattle, the livestock of which is to be increased to 5,000 heads. The article includes an enumeration of what the plant intends to undertake in the way of improvements to comply with the program of the 7-Year Plan. The article further mentions the achievements of the following plants: Michurinskiy eksperimental'nyy spirtovyy zavod VNIISPa (Michurinsk

Card 1/2

SENKEVICH, B.N.

Experimental investigation of the wind erosion of sands.
Izv. AN Turk. SSR. Ser. biol. nauk no.1:21-30 '62. (MIRA 15:3)

1. Institut pochvovedeniya i osvoyeniya peskov AN Turkmenskoy
SSR.

(TURKMENISTAN--WIND EROSION)

SENKEVICH, B.N.

Experimental investigation of the structure of sand flow in a wind tunnel. Izv. AN Turk. SSR. Ser. biol. nauk no.4:30-35 '63.
(MIRA 16:9)

1. Institut pustyn' AN Turkmenskoy SSR.
(Sand) (Wind tunnels)

SENKEVICH, G. [Sian'kevich, H.], starshiy nauchnyy sotrudnik

Vacations have begun. Rab. i sial. 37 no. 6:18 Je '61.

(MIRA 15:2)

1. Pedagogicheskiy institut Ministerstva prosveshcheniya BSSR.
(Vacations)

SENKEVICH, G. A.

ARKHANGEL'SKIY, B.Ye., inzhener; BALAYEV, A.S., inzhener; ~~SENKEVICH, G.A.~~
inzhener; IZOTOV, A.Ye., inzhener, redaktor; KRYUKOV, V.L.,
redaktor; ORLOVA, V.V., tekhnicheskij redaktor

[KD-35 tractor] Traktor KD-35. Pod red. A.E.Izotova. Moskva, Gos.
izd-vo sel'khoz. lit-ry, 1951. 576 p. (MLRA 10:9)
(Caterpillar tractors)

SENKEVICH, G. A.

Traktory KD-35 i KDP-35 (Tractors KD-35 and KDP-35, by) B. Ye. Arkhangel'skiy,
A. S. Balayev, G. A. Senkevich. 2. izd. pod red A. Ye. zotov. Moskva, Selkhozgiz, 1953
543 p. illus., diags., tables.
At head of title: Lipetskiy traktornyy zavod.

N/5
662.115
.A7
1953

ARKHANGEL'SKIY, B.Ye., inzhener; BALAYEV, A.S., inzhener; ~~SENKEVICH, G.A.~~,
inzhener; IZOTOV, A.Ye., inzhener, redaktor; KRYUKOV, V.L., redaktor;
FEDOTOVA, A.F., tekhnicheskij redaktor

[The Tractors KD-35 and KDP-35] Traktory KD-35 i KDP-35. 3-e izd.
Pod red. A.E.Izotova. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954.
552 p. (MIRA 8:4)
(Caterpillar tractors)

SENKEVICH, G.A.

BALAYEV, Aleksandr Stepanovich, inzhener; ARKHANGEL'SKIY, B.Ye., inzhener;
SENKEVICH, G.A., inzhener; KRYUKOV, V.L., redaktor; BALLOD, A.I.,
tekhnicheskii redaktor

[D-38 engine] Dvigatel' D-38. Moskva, Gos.izd-vo sel'khoz.lit-ry,
1957. 223 p. (MIRA 10:11)
(Tractors--Engines)

ARKHANGEL'SKIY, Boris Yevgrafovich, inzhener; BALAYEV, A.S., inzhener;
~~SENKOVICH, G.A.~~, inzhener; KRYUKOV, V.L. redaktor; PAVLOVA, M.M.,
tekhnicheskiy redaktor,

[KDP - 35 tractor manual] Rukovodstvo po traktoru KDP - 35.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 360 p. (MLRA 10:4)
(Tractors)

SENKEVICH, G. L.

New type of derrick. Nov.neft.tekh.:Bur.no.3:7 '48.(MLRA 9:4)
(Oil wells--Equipment and supplies)

SENKEVICH, G.I.

Dynamic loading and critical revolutions of roller bits in turbo-
drilling. Azerb. neft. khoz. 37 no.5:18-21 My '58. (MIRA 11:8)
(Boring)

BENIN, V.L.; ~~SENKEVICH, I.N.~~

Designing four-choke reversible circuits of an asynchronous squirrel-cage engine used in automatic control systems. Sbor. trud. lab. gidr. mash. no.7:198-211 '58. (MIRA 12:9)
(Electric motors, Induction) (Electric circuits)

SENKEVICH, Igor' Nikolayevich, assistant

Comparison of the reversible networks of the magnetic drives of
three-phase asynchronous short-circuited motors. Izv. vys.
ucheb. zav.; elektromekh. 3 no.6:131-138 '60. (MIRA 15:5)

1. Kafedra elektricheskikh stantsiy Khar'kovskogo politekhnicheskogo
instituta.

(Electric motors, Induction)
(Magnetic amplifiers)

BENIN, Vladimir L'vovich, kand.tekhn.nauk, dots.; SENKEVICH, Igor'
Nikolayevich, assistent.

Calculation of the volume of steel contained in magnetic amplifiers
with noncontact reversive circuits with six chokes for controlling
short-circuited three-phase asynchronous motors. Izv.vys.ucheb.
zav.; elektromekh. 4 no.8:61-71 '61. (MIRA 14:8)

1. Kafedra elektricheskikh stantsiy Khar'kovskogo politekhnicheskogo instituta.
(Magnetic amplifiers) (Steel) (Electric motors, Induction)

SENNEVICH, I.V.

Conference held at the Moscow Power Engineering Institute on the
results of research conducted in 1960. Elek. sta. 32 no.7:92-96
J1 '61. (MIRA 14:10)

(Electric engineering--Congresses)

DAYCHIK, M.L., inzhener, redaktor; SHTEYNBOK, G.Yu., inzhener, redaktor;
SENKEVICH, I.V., inzhener, redaktor; UDAL'TSOV, A.N., glavnyy
redaktor

[Accelerometer A-2; an instrument for indicating overloading;
Vibrograf V11] Akselerometr A-2, Pribory dlia registratsii pere-
gruzok, Vibrograf V11. Moskva, 1955. 18 p. (Pribory i stendy.
Tema no.1, no.PS-55-489) (MLRA 9:9)

1. Moscow. Institut tekhniko-ekonomicheskoy informatsii.
(Measuring instruments)

BATMANOVSKIY, Yevgeniy Aleksandrovich; KARPIKHIN, Vladimir Vasil'yevich;
UDAL'TSOV, A.N., glavnyy redaktor; SHTEYN, V.M., inzhener, redaktor;
SENKEVICH, I.V., inzhener, redaktor

[Recording double bridge for studying electric properties of alloys.
Stand for measuring the remittance of duct capacitors] Samopishushchii
dvoynoi most dlia issledovaniia elektricheskikh svoistv splavov. Stend
dlia izmereniia soprotivleniia prokhodnykh kondensatorov. Tema 5,
no.1-56-456. Moskva, 1956. 16 p. (MLRA 10:5)

1. Moscow. Institut tekhniko-ekonomicheskoy informatsii.
(Alloys--Electric properties) (Condensers (Electric))

SENKEVICH, I.V.
LIPAYEVA, Galina Akekseyevna; ROZENBERG, Samuil Vul'fovich; GOOSEN, Kira
Yakovlevna; UDAL'TSOV, A.N., glavnyy red.; SENKEVICH, I.V., inzh.
red.

[Resonator installation for measuring dielectrics and magnito-
dielectrics at 3cm. wave lenth. Overload ammeter] Rezonatornaia
ustanovka dlia izmereniia dielektrikov i magnitodielektrikov pri
dline volny 3 sm. Peregruzochnyi ampermeter. Moskva, 1956. 17 p.
(Pribory i stendy. Tema 5, no.P-56-446) (MIRA 11:3)

1. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.
Filial.

(Electric resonators) (Ammeter) (Dielectrics)

SENKEVICH, I.V.
BILIK, Radiy Vasil'yevich, inzh.; SENKEVICH, I.V., inzh., red.; UDAL'TSOV,
A.N., glavnyy red.

[Cyclic telemetering apparatus] Ustroistvo tsiklicheskogo teletzmereniia.
Moskva, In-t tekhniko-ekon.inform. 1956. 19 p. (Informatsiia o nauchno-
issledovatel'skikh rabotakh. Tema 30, I-56-92) . (MIRA 11:2)
(Telemetering)

SENKEVICH, I.V.

DRUZHININ, N.I., kandidat tekhnicheskikh nauk; SHTEYNBAK, G.Yu., inzhener,
redaktor; SENKEVICH, I.V., inzhener, redaktor; UDAL'TSOV, A.N.,
glavnyy inzhener

[Portable instruments for electrohydrodynamic analogy] Portativnye
pribory EGDA. Tema 5, no.P-56-435. Moskva, Akademiya nauk SSSR,
1956. 35 p. (MIRA 10:3)

(Electromechanical analogies)

(Soil percolation) (Water, Underground)

SENKEVICH, I.V., starshiy nauchnyy sotrudnik; YUNALEYEVA, S.A., nauchnyy
sotrudnik.

Working conditions and physiological changes in tractor operators
using diesel skid tractor. Gig. i san. 24 no.5:10-12 My '59. (MIRA 12:7)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta travmatologii i
ortopedii.

(INDUSTRIAL HYGIENE,
in tractor operation (Rus))

SENKEVICH, I.V.

KIBYAKOV, A.V.; SENKEVICH, I.V.

Effect of the removal of chromaffin tissue on the sympathetic innervation of certain organs. Izv.Kazan.fil.AN SSSR.Ser.biol.i sel'khoz. nauk no.2:163-171 '50. (MLRA 10:2)

(Adrenal glands--Innervation)
(Sympathins)

CA SENKEVICH, I.V.

117

Relation between the adaptation-tropic filaments of sympathetic nervous system and the adrenals. I. V. Senkevich (Kazan Sect., Acad. Sci). *Fiziol. Zhur. S.S.S.R.* 36: 538-35(1950).—The source of sympathin in animals appears to be adrenaline circulating in the blood. In the absence of sympathin the sympathetic nervous system loses the ability to transmit through its adaptation-tropic fibers the impulses to the appropriate tissues. G. M. K.

Section of Experimental Biol., Biol. Inst..

1951