S/803/62/000/003/012/012
D201/D308

AUTHORS: Arkhipov, V.K. and Stepanov, B.N.

TITLE: Operating conditions of a charge storing cathode ray tube securing maximum writing speed in registering single fast transient processes

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Avtomatika i telemekhanika, no. 3, 1962. Sistemy upravleniya yadevnymi energeticheskimi ustanovkami, 103-106

TEXT: From the most general concepts of potential relief recording and reading processes, the authors determine the conditions for maximum recording speed for a given S/N ratio during the read-out process. Since the recording speed is assumed to be high the secondary emission coefficient is taken as constant and the charge as proportional to the time during which the beam is directed at the screen surface element. The expressions derived for the signal and noise voltage amplitudes show that for a given set of conditions the signal voltage amplitude depends on the mode of recording and on

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stray capacitances only. For increasing the signal amplitude - the recording beam current has to be increased and strays decreased; the operating conditions should be such as to result in a maximum effective suppression of secondary emission electrons during recording in order to obtain the maximum possible charge of the spot.

ARKHIPOV, V.K.; STEPANOV, B.M.; TURKIN, V.M.

Performance of an electron-beam oscilloscope tube in charge storage operation with prerecording preparation of the screen. Avtom.i telem.; sbor.st. no.3:70-85 '62. (MIRA 16:2)
(Cathode ray tubes)

ARKHIPOV, V.K.; STEPANOV, B.M.

Performance of an electron-beam oscilloscope tube in charge storage operation with forced takeoff of the secondary electrons during recording. Avtom.i telem.; sbor.st. no.3:86-102 '62.
(MIRA 16:2)

(Cathode ray tubes)

ARKHIPOV, V.K.; STEPANOV, B.M.

Telemetering of high-speed processes. Izv. vys. ucheb. zav.; radiotekh. 6 no.5:554-561 S-O '63. (MIRA 17:1)

1. Rekomendovana kafedroy avtomatiki i telemekhaniki Moskovskogo inzhenerno-fizicheskogo instituta.

ARKHIPOV, V.M.

Adjustment in rolling mills producing sectional iron. Metallurg no.5:34-35 My '56. (MLRA 9:9)

1.Zamestitel' nachal'nika sortoprokatnogo tsekha Magnitogorskogo metallurgicheskogo kombinata.
(Magnitogorsk--Rolling (Metalwork))

L 44005-66 EWT(m)/EWP(t)/T/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6029871 SOURCE CODE: UR/0413/66/000/015/0022/0022

INVENTOR: Voronov, F. D.; Filatov, A. D.; Gun, S. B.; Selivanov, N. M.; Nosov, V. D.; Savel'yev, G. V.; Goncharov, F. I.; Plotnikov, P. I.; Roshkov, S. A.; Kustobayev, G. G.; Polushkin, V. P.; Arkhipov, V. M.; Uziyenko, A. M.; Kolov, M. I.; Kozhevnikov, V. P.; Shapiro, B. S.; Kalugin, V. F.; Grudev, P. I.; Aksenov, B. N.; Khomyachkov, A. P.; Rudakov, Ye. A.; Kuzema, I. D.; Gomzhin, V. V.; Poydyshev, B. N.; Shternov, M. M.

ORG: none

TITLE: Method of making high-strength steel plates by pack rolling. Class 7, No. 184232

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 22

TOPIC TAGS: high strength steel, high strength steel plate, high strength steel sheet, steel plate rolling, steel sheet rolling

ABSTRACT: This Author Certificate introduces a method of pack rolling high-strength steel plates and sheets up to 10 mm thick and up to 3500 mm wide in a carbon steel envelope. The method includes cleaning, coating, making of the pack, heating, rolling, and subsequent heat treatment. To ensure an accurate thickness of the plates

Card 1/2 UDC: 621.771.23

L 44005-66

ACC NR: AP6029871

or sheets regardless of their location in the pack, the thickness of the envelope must be at least 0.6 of the total initial thickness of the high-strength plates of the pack.

[ND]

SUB CODE: 13/ SUBM DATE: 18Jun64/ ATD PRESS: 5070

Card 2/2 blg

ARKHIPOV, Vadim Matveyevich; BUSYGIN, Yevgeniy Prokof'yevich; VOROB'YEV, N.I., prof., red.; KUSURGASHEV, I.M., red.

[Antarctica and its exploration by Soviet scientists] Antarktida i ee issledovanie sovetskimi uchenymi. Kazan' Izd-vo Kazanskogo univ., 1959. 49 p. (MIRA 15:3)
(Antarctic regions—Soviet exploration)

24,3300

68324

AUTHOR: Arkhipov, V.M.

SOV/51-6-1-25/40

TITLE: On the Interference-Modulation Method

PERIODICAL: Optika i spektroskopiya, 1959, Vol 6, Nr 1, pp 122-125 (USSR)

ABSTRACT: This is a summary of a report presented at the conference on the Theory of Spectroscopic Instruments (Moscow, Jan 27, 1958). The author discusses the relationship between the theoretical resolution due to a dispersing element (a diffraction grating) and the theoretical resolution of an instrument in which interference modulation is used (Refs 1-15). It is assumed that when the extinction curve is sufficiently small (interference is neglected), the resolution of an instrument for two very narrow lines of wavelengths of λ and $\lambda + \delta\lambda$ is governed only by the theoretical resolving power of the diffraction grating (Ref 2). The value of $\delta\lambda$ is chosen in accordance with Rayleigh's criterion. Such a distribution of intensity would occur in the focal plane of the usual autocollimating spectrometer with a grating for which:

$$Rd_0 = \text{const} \qquad (1a)$$

where R is the theoretical resolving power of the grating, d_0 is the angular separation of the centre of the diffraction spot and point of intersection of the contours to be resolved (Fig 1), i is the diffraction

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angle. Usually tan i = 0.5-1 and consequently it is assumed:

$$R\Phi_0 = 1. \qquad (1b)$$

The paper discusses also interference modulation of beams diffracted by two gratings; for this purpose it is necessary to vary at a constant rate the path difference between the interfering beams. It is shown that using interference modulation and a receiver-amplifier system with sufficiently narrow transmission bands one can obtain (1) higher speed by increasing the entry aperture of the interferometer with the resolution determined by a diffraction grating, and (2) up to R times greater resolution than that obtainable with a grating. There are 3 figures and 15 references, 2 of which are Soviet, 3 English, 2 German, 7 French and 1 international.

4

ARKHIPOV, V.M. (G. Moskva)

Atheistic significance of the teachings of I.P. Pavlov. Biol. v shkole no.2:85-90 Mr-Ap '61. (MIRA 14:3)
(Pavlov, Ivan Petrovich, 1849-1936)
(Reflexes) (Soul)

24.3300

S/051/62/012/003/016/016
E032/E314

AUTHOR: Arkhipov, V.M.

TITLE: Development of a spectrometer with selective interference amplitude-modulation

PERIODICAL: Optika i spektroskopiya, v. 12, no. 3, 1962, 446 - 448

TEXT: In 1957 R. Connes (Ref. 1 - Opt.Acta. 4, 136, 1957; Rev. Opt., 38, 157, 1959; 38, 416, 1959; 39, 402, 1960) suggested a new type of spectrometer and in an earlier paper the present author et al (Ref. 2 - Tr. 13, Vses. soveshch. po spektrosk., Leningrad, 1960) discussed the requirements which must be satisfied by any practical design. A description of a spectrometer built in accordance with Connes' principle (Ref. 1) is given in the present note. A schematic drawing is shown in Fig. 1. The source of radiation S is imaged on the circular entrance aperture O_1. The radiation is then received by a semi-transparent plate $П_1$ and is thrown by the mirror $З_2$ onto the objective $З_3$. The resulting parallel beam is incident

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normally onto the grating P which is blazed at ±12 deg. After diffraction, the left and right beams pass through the plates $П_2$ and $П_3$, are reflected from the mirrors $З_4$ and $З_5$ and again reach the grating P. They are then returned through $З_3$ and $З_2$ to $П_1$ and finally reach the exit aperture $О_2$. They are detected by the photomultiplier ФЭУ-2 (FEU-2), whose output is amplified, detected and finally exhibited on the chart of a pen-recorder. The plate $П_3$ is used as the modulator. It is rocked with an adjustable period and amplitude by the mechanical system shown on the righthand side of Fig. 1. The experimental results indicate that the resolution of the device is approximately equal to twice the theoretical resolving power of the grating. The actual figure obtained in the resolution was 2×10^5. There are 3 figures.

SUBMITTED: October 5, 1961

Card 2/3

ARKHIPOV, V.M.

Interference spectrometer with selective amplitude modulation.
Opt. i spektr. 12 no.3:446-448 Mr '62. (MIRA 15:3)
(Spectrometer) (Interferometer)

ARKHIPOV, V.N.

Stability of a laminar trailing zone. Vest. Mosk.un. Ser. mat. mekh. astron. fiz. khim. 12 no.4:41-44 '57. (MIRA 11:5)

1.Kafedra aeromekhaniki i gazovoy dinamiki Moskovskogo gosudarstvennogo universiteta.
(Aerodynamics)

ARKHIPOV, V.N., Cand Phys-Math Sci--(diss) "~~The~~ Stability of ~~the current of~~ flow fluid and formation of vibrations in the trail ~~behind the~~ of a streamlined body." [Mos], 1958. 7 pp,incl cover (Mos Order of Lenin and Order of Labor Red Banner State U im M.V.Lomonosov. Mech-Math Faculty), 150 copies (KL,45-58, 141)

10(4)

AUTHOR: Arkhipov, V. N.

SOV/20-123-4-11/53

TITLE: Formation of Oscillations in the Wake of a Moving Body (Obrazovaniye kolebaniy v slede za telom)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4, pp 620-622 (USSR)

ABSTRACT: A twodimensional perturbing motion with the perturbation function $\psi(x,y,t) = \varphi(y)e^{i\alpha(x-ct)}$ is assumed to be superimposed on the plane-parallel flow of a viscous incompressible liquid with the velocity components $v \equiv 0$, $u = u(y)$. Here it holds that $c = c_r + ic_i$, $\alpha = 2\pi/a$; c_r, c_i are real numbers, a denotes the length of the disturbing wave, the amplitude $\varphi(y)$ of which is considered to be small. The problem of the stability of such a flow is reduced to the investigation of the equation

$$(u - c)(\varphi'' - \alpha^2\varphi) - u''\varphi + \frac{i\nu}{\alpha}(\varphi^{IV} - 2\alpha^2\varphi'' + \alpha^4\varphi) = 0,$$

where ν denotes viscosity. The distribution of the velocities in the wake of the body is assumed to be similar to the distribu-

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tion calculated by Tollmien (Tol'min). The author then passes on to dimensionless quantities, in which case the breadth l of the "accompanying beam" (sputnaya struya) is used as a characteristic linear measure. Next, the boundary conditions are explicitly written down. The equation for the dimensionless quantities is solved by Galerkin's method in consideration of the aforementioned boundary conditions. Calcu. tions are carried out in second approximation. The antisymmetric perturbations begin to develop already at considerably lower values of Re_1 ($Re_{1kr} \sim 19$) than the symmetric perturbations ($Re_{1kr} \sim 55$). This result confirms those of earlier investigations carried out by G. I. Petrov and also agrees with the experiment. The results obtained here hold good for accompanying beams in the wake of bodies of any shape. The phenomena occurring in an accompanying beam behind a circular cylinder are the experimentally best investigated ones. When investigating the stability of the flow in the beam behind the cylinder, that cross section of the beam was selected in which the velocity gradient is the greatest. There it applies that $u(0) = 0$. The Strukhal number was calculated according to the formula $Sh = \alpha_2 c_{r2}/2\pi$. A diagram shows the dependence of the

Formation of Oscillations in the Wake of a Moving Body

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Strukhal number Sh on Re, and, for comparison, it contains also the dependence of the quantity Nd/u_∞ on Re. Here N denotes the frequency of the formation of vortices, and d denotes the characteristic transversal dimensions of the body. For the same Re also the values of a/d were calculated. The results obtained by means of the linear hydrodynamic theory of stability and concerning the development of perturbations in the accompanying beam agree well with the experimental data on the formation of "vortex paths". This confirms the correctness of the hypothesis formulated in the present paper. The author thanks G. I. Petrov, Academician, for his useful advice. There are 2 figures and 9 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 1, 1958, by G. I. Petrov, Academician

SUBMITTED: June 25, 1958

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8(0)

AUTHORS: ~~Arkhipov, V. N.,~~ Babikov, M. A., Morozov, D. P., Petrov, G. N., Chechet, Yu. S., Chilikin, M. G. SOV/105-59-7-27/30

TITLE: Corresponding Member of the AS USSR A. N. Larionov (Chlen-korr. AN SSSR A. N. Larionov)On His 70th Birthday (K 70-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1959, Nr 7, p 91 (USSR)

ABSTRACT: Corresponding Member of the AS USSR, Doctor of Technical Sciences, Professor Andrey Nikolayevich Larionov, was born on July 16, 1889. He began his pedagogical and scientific activities in 1919 after leaving the MVTU as Engineer-electrotechnician. In 1930 he was appointed to the Chair for "Special Electric Machines" at the MVTU, was confirmed as Professor in 1933, and took the degree of Doctor of Technical Sciences in 1937. 1925 - 1932 the power engineering plants of Azneft', Grozneft', and Donbass were investigated under his supervision, and on the basis of the data obtained, they were reorganized. 1920 - 1936 he was occupied with solving problems connected with the putting into operation and operating of turbo- and hydraulic generators. In 1930 high-voltage direct current units were produced according to his plans and under his super-

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vision for the transmitting plants of sea vessels. He is one of the creators of the electrical equipment of the aircraft "Maksim Gor'kiy". 1933 - 1934 he was a Member of the Arbitration Court of Berlin. In 1935 he was appointed to the Chair for "Electrical Equipment of Industrial Plants", and since 1941 he has been in charge of the Chair for the "Electrical Equipment for Aircraft, Automobiles, and Tractors" at the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering). He worked at this Institute already in 1921, first as scientific collaborator and later as scientific Director. In 1953 he was appointed Corresponding Member of the AS USSR. Thanks to his work, hysteresis motors were for the first time designed and produced in the USSR. He took out numerous patents and published a number of works. He is the inventor of the "Wiring Scheme for the Rectification of Alternating Current", which is known all over the world. As a side-line he supervises a group at the laboratory of the institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the Academy of Sciences of the USSR), he is

Corresponding Member of the AS USSR A. N. Larionov. On His 70th Birthday

SOV/105-59-7-27/30

Consultant of a number of research institutes, OKB, and plants, as well as Chairman of the Committee for Permanent Magnets of the AS USSR. He is holder of the Order of Lenin. There is 1 figure.

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10.2000(A)
24(3)

67248

SOV/20-129-4-10/68

AUTHOR: Arkhipov, V. N.

TITLE: The Influence of a Magnetic Field on the Stability of a Boundary Layer

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 4, pp 751-753 (USSR)

ABSTRACT: The author assumes a parallel flow of a viscous, conductive, incompressible gas with the velocity components $u = u(y)$, $v = 0$, $w = 0$. The magnetic field $H = H(y)$ is assumed to have the direction of the Oy axis, and the magnetic Reynolds numbers are assumed to be small. The problem of the stability of such a flow with respect to small perturbations of the velocity field and the magnetic field is known to be reduced to an investigation of the equation

$$L(\psi) \equiv (u-c)(\psi''-\alpha^2\psi)-u''\psi + \frac{i\alpha}{R}(\psi^{IV}-2\alpha^2\psi''+\alpha^4\psi)-\frac{iM^2}{\alpha R}(\psi'') = 0.$$

All quantities occurring in this equation are dimensionless, and are referred to the characteristic velocity u_0, the characteristic length l, and to the characteristic magnetic field H_0.

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The Influence of a Magnetic Field on the Stability of a Boundary Layer

Furthermore, $\alpha = 2\pi l/\lambda$ holds, where λ denotes the wavelength of the perturbation. $Re = u_o l/\nu$; ν - viscosity; $M^2 = \mu H_o l/\sqrt{\sigma\varrho\nu}$; μ - magnetic permeability of the gas; σ - conductivity of the gas; ϱ - gas density; the small perturbation v' of the transversal velocity is represented in the form $v' = \psi(y)e^{i\alpha(x-ct)}u_o$. Here, $c = c_r + ic_i$ holds, where c_r and c_i are real numbers. In addition, there are the boundary conditions $\psi = \psi' = 0$ with $y = 0$ and $\psi = \psi' = 0$ with $y \to \infty$. The author investigates the stability of the flow velocity profile in the conductive boundary layer of an incompressible gas along a plane plate for the case $u_o^2/2c_p = 1.85.10^4$ °K calculated by V. J. Rossow (Ref 2). This profile is here approximated by a sixth-degree polynomial with respect to y. The quantity $l = 1.73\sqrt{\nu x/u_o}$; H = H(0) is here chosen as a characteristic linear dimension. Like G. I. Petrov (Ref 3) the author solves the eigenvalue problem of the aforementioned problem according

The Influence of a Magnetic Field on the Stability of a Boundary Layer

to Galerkin's method. For this purpose the system of equations $\sum_{k=1}^{m} e_k \int_0^\infty L(\psi_k)\,\psi_i dy = 0$, $i,k = 1, 2, \ldots m$ is investigated, where e_k are arbitrary constants and $\{\psi_k(y)\}$ is a system of "approximation functions" which satisfy the above boundary conditions. The problem is reduced to investigating the equation $|D_{ik}| = 0$, where $|D_{ik}| = \left|\int_0^\infty L(\psi_k)\,\psi_i dy\right|$ is the determinant of the system of equations just written down. In this case the system of approximation functions may be chosen in the form $\psi_k = (1 - e^{-y})^2 e^{-ky}$, $k = 1,2,\ldots$. The equation $f(\alpha,Re) = 0$ in the (α,Re)-plane defines the neutral curve which separates the range of stability ($c_i < 0$) from that of instability ($c_i > 0$). The "least" value $Re = Re_{kr}$ on the "neutral" curve characterizes the transition of the flow into the unstable state. A diagram shows the curve calculated in second approximation for

The Influence of a Magnetic Field on the Stability of a Boundary Layer

$M^2 = 0$ according to Galerkin's method. For comparison, also the curves calculated by S. F. Shen' (Ref 4), G. Shlikhting (Ref 5) and J. A. Zaat (Ref 6) are given. The second diagram shows the curves calculated (in second approximation) according to Galerkin's method in the (α, Re)-plane for various values of M^2. There are 2 figures and 6 references, 3 of which are Soviet.

PRESENTED: July 9, 1959, by G. I. Petrov, Academician

SUBMITTED: July 2, 1959

4

Card 4/4

CHILIKIN, M.G.; LARIONOV, A.N.; ANDRIANOV, K.A.; MESHKOV, V.V.; IONKIN, P.A.; ARKHIPOV, V.N.; PETROV, G.N.; BRAGIN, S.M.; PRIVEZENTSEV, V.A.; TAREYEV, B.M.

Professor N.G. Drozdov. Elektrichestvo no.10:90 O '60. (MIRA 14:9)

(Drozdov, Nikolai Gavrilovich, 1900-)

89396

10.2000
26.2160

S/040/61/025/001/015/022
B125/B204

AUTHOR: Arkhipov, V. N. (Moscow)

TITLE: The plane-parallel flow of a compressible liquid in the track behind a body

PERIODICAL: Prikladnaya matematika i mekhanika, v. 25, no. 1, 1961, 138-139

TEXT: The plane-parallel flow of a viscous incompressible liquid is assumed to flow with the velocity u_∞ = const against an immobile body which is symmetric with respect to the direction of the flow. At a large distance from the body the pressure is assumed to be approximately constantly distributed over the cross section, and the transversal velocity is assumed to be low compared to the longitudinal velocity. The rate of change of the longitudinal velocity along the axis of the track is assumed to be low compared to its rate of change in the cross section. Besides, the pressure gradient along the axis of the track in the unlimited velocity is assumed to be extremely low. The following equations then hold:

$$\rho u \frac{\partial u}{\partial x} + \rho v \frac{\partial u}{\partial y} = \frac{\partial}{\partial y}\left(\mu \frac{\partial u}{\partial y}\right) \text{ (equation of motion) (1)}$$

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The plane-parallel flow of a...

$$\rho u \frac{\partial(Cpt)}{\partial x} + \rho v \frac{\partial(Cpt)}{\partial y} = \frac{\partial}{\partial y}\left(k \frac{\partial t}{\partial y}\right) + \frac{\mu}{J}\left(\frac{\partial u}{\partial y}\right)^2 \quad \text{(energy equation) (2)}$$

$$\frac{\partial(\rho u)}{\partial x} + \frac{\partial(\rho v)}{\partial y} = 0 \quad \text{(continuity equation) (3)} \quad \rho t = \rho_\infty t_\infty \quad \text{(equation of state) (4)}.$$

Here the coordinate x along the symmetry axis is taken; u and v are the components of velocity along the coordinate axis, ρ - the density of the liquid, μ - its viscosity, t - temperature, C_p - the specific heat at constant pressure, k - the thermal conductivity, J - the mechanic heat equivalent. By ∞ the parameters of the undisturbed flow are denoted. Furthermore, C_p = const, $Pr = \frac{C_p \mu}{k} = 1$, $\frac{\mu}{\mu_\infty} = \left(\frac{t}{t_\infty}\right)^m$ (m = const) is assumed. In this case the energy equation supplies the Crocco integral $t = A + Bu - \frac{u^2}{2C_p J}$ (6), where A, B are indefinite constants.

With $u = \frac{\rho_\infty}{\rho}\frac{\partial \psi}{\partial y}$, $v = -\frac{\rho_\infty}{\rho}\frac{\partial \psi}{\partial x}$ and $\left(\frac{\partial}{\partial y}\right)_x = \frac{\rho u}{\rho_\infty}\left(\frac{\partial}{\partial \psi}\right)_x$, $\left(\frac{\partial}{\partial x}\right)_y = -\frac{\rho v}{\rho_\infty}\left(\frac{\partial}{\partial \psi}\right)_x + \left(\frac{\partial}{\partial x}\right)_\psi$

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The plane-parallel flow of a...

follows $\rho_\infty \frac{\partial u}{\partial x} = \frac{\partial}{\partial \psi}\left(\mu u \frac{\rho}{\rho_\infty}\frac{\partial u}{\partial \psi}\right)$ (7). At great distance from the body it now holds in the track that $u \sim u_\infty + u_1$, $v \sim v_1$, where u_1 and v_1 are small. When restricting oneself to the principal terms it follows from (7) that $\rho_\infty \frac{\partial u_1}{\partial x} = u_\infty \frac{\partial}{\partial \psi}\left(\frac{\mu_\rho}{\rho_\infty}\frac{\partial u_1}{\partial \psi}\right)$ (8). By the dimensionless quantities $U_1 = \frac{u_1}{u_\infty}$, $T = \frac{t}{t_\infty}$, $X = \frac{x}{L}$, $\Psi = \frac{\psi}{\sqrt{u_\infty \nu_\infty L}}$, $\left(\nu = \frac{\mu}{\rho}\right)$ and $\frac{\mu_\rho}{\rho_\infty} = \mu_\infty T^{m-1}$ it follows from (8) that $\frac{\partial U_1}{\partial X} = \frac{\partial}{\partial \Psi}\left(T^{m-1}\frac{\partial U_1}{\partial \Psi}\right)$ (9). With $m = 1$ an analytical solution is obtained. The boundary conditions to (1)-(4) read as follows: $v = 0$, $\frac{\partial u}{\partial y} = 0$ with $y = 0$, $u \to u_\infty$, $v = 0$, $t = t_\infty$ with $y \to \pm\infty$ (11), and herefrom follows $U_1 = 0$ with $\Psi = \infty$, $\frac{\partial U_1}{\partial \Psi} = 0$ with $\Psi = 0$, if the axis of symmetry is taken as flow line. The total flux of momentum through a

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B125/B204

The plane-parallel flow of a...

certain control plane through the body is $\int_{-h}^{h} \rho u u_1 dy$. With $U_1 = Cx^{-1/2} g(\xi)$ the differential equation $g'' + \frac{1}{2}\xi g' + \frac{1}{2}g = 0$ (16) follows from (9). By double integration in consideration of the boundary conditions $g' = 0$ with $\xi = 0$, $g \to 0$ with $\xi \to \infty$ (17) follows $g = \exp(-\frac{1}{4}\xi^2)$ (18). Determination of the constants A, B, C is briefly described. The temperature t is determined from (6) and the density ρ is determined from (4). An analogous problem for an incompressible liquid was solved by W. Tolmien.

SUBMITTED: November 16, 1960

Card 4/4

42042

S/207/62/000/004/001/006
I028/I242

AUTHOR: Arkhipov, V.N. (Moscow)

TITLE: Rarefaction wave in a relaxed gaseous mixture

PERIODICAL: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no.4, 1962, 40-46

TEXT: The propagation of a one-dimensional, centered rarefaction wave in a reactive gaseous mixture is considered. The mixture is contained in a pipe of uniform section closed at the left end by a piston. At the moment $t = 0$ the piston starts to move to the left at constant velocity $U_p < 0$. This causes the propagation of a disturbance to the right which disturbs the equilibrium and produces chemical reactions in the mixutre. The thermo-

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Rarefaction wave in...

dynamic relationships, the momentum, contiunuity (for the separate components and for the mixture as a whole), and energy equations are written down as non-dimensional variables. A method for solving the resulting system of equations for the case $t \to 0$ is indicated. This solution represented the boundary conditions in the problem of the determination of the gas parameters in the rarefaction wave taking the relaxation into account. Numerical results are given for the case of an ideally dissociating gas; the profile of the temperature in the rarefaction wave is represented graphically for the values $t/\tau = 0, 0.5, 1.0, 1.5, 2.0$ (τ = characteristic time of the problem). For the limiting case $t \to \infty$ the general equations are reduced to a system describing a centered wave propagating in the medium without disturbing its thermodynamic and chemical equilibrium. There are 2 figures.

SUBMITTED: April 25, 1962

Card 2/2

ARKHIPOV, V.N. (Moskva); KHOROSHKO, K.S. (Moskva)

Problem of a flow past a cone allowing for relaxation. PMTF no.6:121-124 N-D '62. (MIRA 16:6)

(Gas dynamics)

ACCESSION NR: AP3014918 S/0207/63/000/005/0035/0040

AUTHORS: Arkhipov, V. N. (Moscow); Severinov, L. I. (Moscow)

TITLE: Rotational relaxation in a plane-parallel rarefaction wave

SOURCE: Zhurnal prikl. mekhaniki i tekhn. fiziki, no. 5, 1963, 35-40

TOPIC TAGS: rarefaction wave, rotational relaxation, plane parallel rarefaction wave, rarefaction wave rotational relaxation, supersonic flow, supersonic flow deflection

ABSTRACT: The effect of relaxation time in a rarefaction wave on the flow properties of an inviscid, compressible, non-heat conducting fluid has been analyzed. The relaxation equations are written in polar coordinates r, φ, and the corresponding differential equations for the two families of characteristics are derived, which, for the condition $\varphi = \varphi_0$ are written as

$$V = V_0, \quad \beta = S = 0, \quad p = \rho = T = \theta = a_1 = 1$$

$$\beta(r, \varphi^*) = \varphi^*$$

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ACCESSION NR: AP3014918

where φ^* - angle of incidence less than zero. In the limit $r \to 0$ these equations are transformed to ordinary differential equations describing a supersonic Prandtl-Meyer type flow and are solved iteratively for values in the vicinity of $r = 0$. Numerical solutions are obtained for $\gamma = 5/3$, $V_0 = 2$, and $\varphi^* = -20$ and the flow field described in the domain $\varphi^* \leq \varphi \leq \varphi_0$, $r > 0$. "The author is grateful to V. A. Ipatov." Orig. art. has: 31 equations and 5 figures.

ASSOCIATION: none

SUBMITTED: 17Jan63 DATE ACQ: 27Nov63 ENCL: 00

SUB CODE: PH NO REF SOV: 001 OTHER: 004

Card 2/2

ARKHIPOV, V.N.; BIRYUKOV, V.G.; BRONSHTEYN, A.M.; DROZDOV, N.G.; KRESTOV, N.I.; NAYASHKOV, I.S.; PETROV, G.N.; SIROTINSKIY, L.I.; CHILIKIN, M.G.

Professor G.V. Butkevich; on his 60th birthday. Elektrichestvo no.10:92-93 O '63. (MIRA 16:11)

ACCESSION NR: AP4044737

S/0207/64/000/004/0149/0154

AUTHOR: Arkhipov, V. N. (Moscow)

TITLE: The effect of relaxation on decay of arbitrary rupture

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1964, 149-154

TOPIC TAGS: shock wave, vibrational relaxation, shock wave front, equilibrium flow, rarefaction wave, rotational relaxation

ABSTRACT: The effect of vibrational relaxation in a blast wave before the onset of the secondary shock front was studied analytically. At the shock front equilibrium is assumed for translational and rotational degrees of freedom and behind the shock wave, vibrational equilibrium. The expanding gas is divided into four regions: 1- region between shock wave and surface of contact, 2- region between contact surface and centered rarefaction wave, 3- rarefaction wave, 4- high-pressure unperturbed gas. The governing equations for a plane cylindrical or spherical shock front are in nondimensional form

$$\gamma_0 \frac{\partial u}{\partial t} + \gamma_0 u \frac{\partial u}{\partial r} + \frac{1}{\rho} \frac{\partial p}{\partial r} = 0, \quad \frac{\partial \rho}{\partial t} + u \frac{\partial \rho}{\partial r} + \rho \frac{\partial u}{\partial r} + \frac{n \rho u}{r} = 0,$$

$$\frac{\partial h}{\partial t} + u \frac{\partial h}{\partial r} = \frac{1}{\rho} \frac{\partial p}{\partial t} + \frac{u}{\rho} \frac{\partial p}{\partial r}, \quad p = \rho T$$

Card 1/3

ACCESSION NR: AP4044737

$$\frac{\partial E_k}{\partial t} + u\frac{\partial E_k}{\partial r} = \frac{E - E_k}{\tau}, \qquad E = \frac{R\theta T_0}{\exp(\theta/T) - 1} \quad (\tau = \text{const}),$$

and the following initial conditions are obtained (subscripts refer to the various regions concerned): for region 3, $-a_4 \leq y \leq y_c$, $y = (r-1)/t$

$$y = u^\circ - a_f^\circ, \quad u^\circ = \frac{2(y+a_4)}{\gamma_4 + 1}, \quad \left(\frac{p^\circ}{p_4}\right)^\circ = \left(\frac{\rho^\circ}{\rho_4}\right)^\varkappa = 1 - \frac{y + a_4}{2\lambda a_4},$$

and for regions 2 ($y_c \leq y \leq y_2$) and 1 ($y_2 \leq y \leq y_0$)

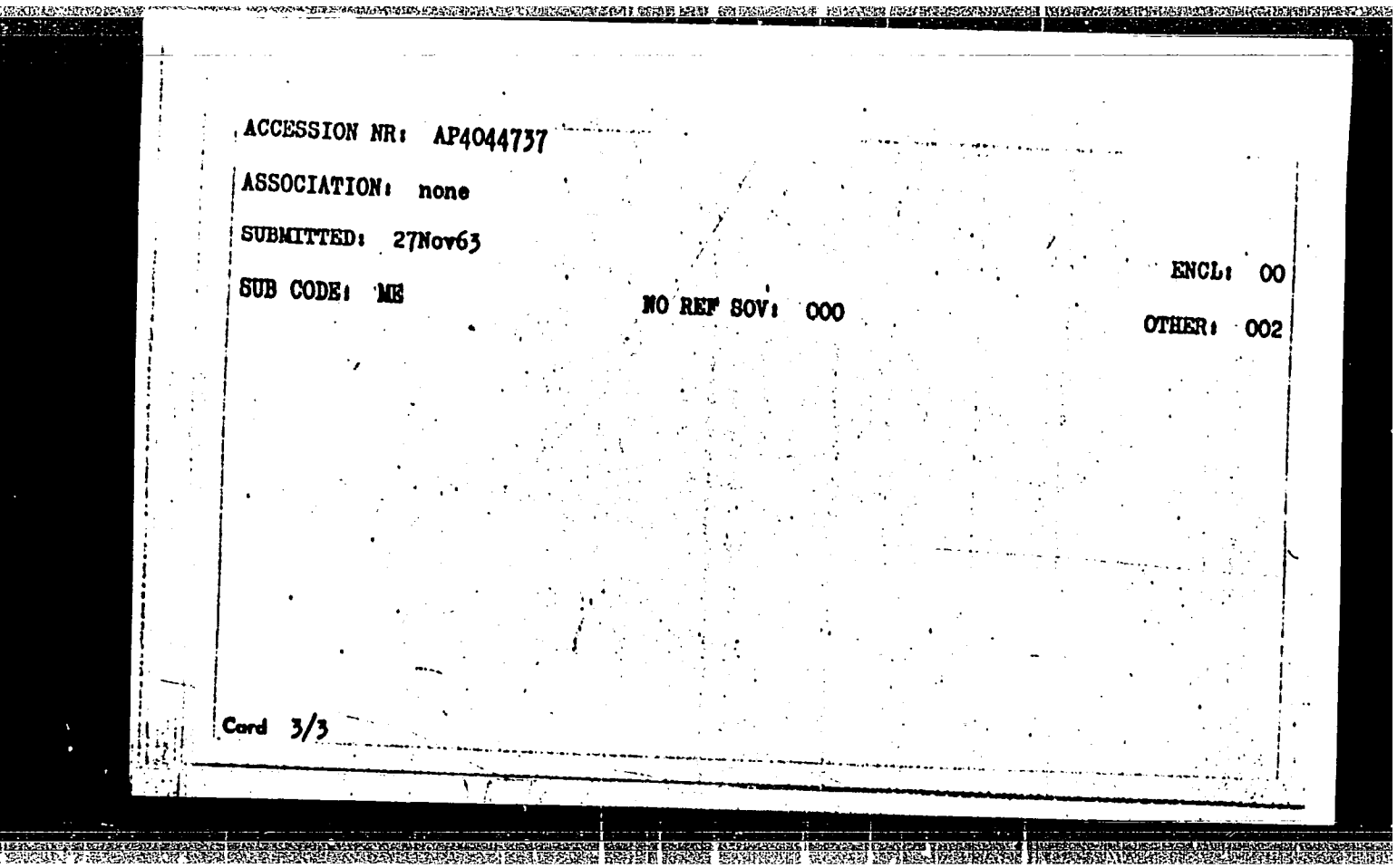
$$u^\circ = u_3, \quad p^\circ = p_3, \quad \rho^\circ = \rho_3, \quad a_f^\circ = a_{f3}$$
$$u^\circ = u_1, \quad p^\circ = p_1, \quad \rho^\circ = \rho_1, \quad a_f^\circ = a_{f1}.$$

The solution is given in a series form for small t

$$f(y, t) = f^\circ(y) + f'(y)\,t + \ldots \quad (f^\circ(y) = f_1(y; 0), \ldots, f = u', p', \rho', E_k'),$$

and the integration constants for the functions $f'(y)$ are determined from three sets of boundary conditions: at the shock wave, at the contact surface (surface dividing the shock-heated gas and rarefaction-cooled gas), and on the characteristics, dividing regions 2 and 3. Numerical calculations for $\theta = 2239/T_0$, $n = 0$, 1, and 2 indicate that reducing the relaxation time decreases the shock speed and increases the contact surface speed. Orig. art. has: 24 equations and 3 figures.

Card 2/3



ACCESSION NR: AP4044737

ASSOCIATION: none

SUBMITTED: 27Nov63

ENCL: 00

SUB CODE: ME

NO REF SOV: 000

OTHER: 002

Card 3/3

L 46673-66 EWP(m)/EWT(1)/EEC(k)-2/EWP(k)/T IJP(c) RTW/WG/WW

ACC NR: AP6020720 SOURCE CODE: UR/0421/66/000/003/0020/0023

AUTHOR: Artamonov, A. K (Moscow); Arkhipov, V. N. (Moscow); Starchenko, G. Ye. (Moscow)

ORG: none

TITLE: Relaxation and radiation behind a direct shock discontinuity

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 3, 1966, 20-23

TOPIC TAGS: shock wave analysis, shock wave physics, air flow, nitrogen, light radiation, gas relaxation

ABSTRACT: The problem is formulated as follows: An equilibrium supersonic air stream is incident on a stationary direct shock discontinuity. The translational and rotational energies behind the shock waves are at their equilibrium values, and the processes of vibrational and electronic excitation, dissociation, and ionization (assumed to be single) are not in equilibrium. The electron and heavy-particle temperatures are assumed equal. Radiation due to $N_2 \approx N_2^+$ transitions are taken into account, and other secondary processes are neglected. The chemical reactions taken into account are listed. Vibrational relaxation of O_2 and N_2 is taken into account. Calculations based on the equations of motion of the mixture and various rate constants taken from other papers yield plots of the distribution of various parameters (density, temperature, electron mass fraction, excited- and unexcited-component mass fractions, radiant-energy distribution) for air and for nitrogen. The results agree well with experimental data on the summary radiant fluxes from the nonequilibrium zone.

Card 1/2

L 46673-66

ACC NR: AP6020720

behind the shock wave. The authors thank L. S. Krivonos for help. Orig. art. has: 6 figures, 6 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 10Jul65/ ORIG REF: 003/ OTH REF: 013

Card 2/2 hs

ARKHIPOV, V. N.

"Research in the Field of Diazo Compounds"., V. V. Kozlov, V. N. Arkhipov, and A. V. Simanovskaya (p. 697)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1940, Volume X, no. 8.

ARKHIPOV, Viktor Nikolayevich; KNYAZEV, V.V., red.; BRULIKOVSKAYA, R.G., tekhn.red.

[Resin from petroleum and chlorine; polyvinyl chloride resin] Smola iz nefti i khlora; polivinilkhloridnaia smola. Gor'kii, Gor'kovskoe knizhnoe izd-vo, 1959. 34 p. (MIRA 13:4)
(Resins, Synthetic) (Ethylene)

ARKHIPOV, V.S.

Myrobalan plum use as graft-stock for plum in the central part of the R.S.F.S.R. Agrobiologiia no. 3:464-465 My-Je '60. (MIRA 13:12)

1. Sel'skokhozyaystvennyy institut imeni I.V.Michurina, g.Michurinsk.
(Plum)

BORISOGLEBSKIY, A. D., ARKHIPOV, V. S.

Apple

Valuable apple variety--the seedless komsina. Sad i og. No. o, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

ARKHIPOV, V.V.; POLOKHIN, P.N.

Recording devices. Priborostroenie no.1:26-29 Ja '60.
(MIRA 13:5)
(Recording instruments)

ARKHIPOV, VLADIMIR VASIL'EVICH

Instructions for themanufacture of electrodes for railroad electric smelting furnaces Moskva, Transzheldorizdat, 1943. 12 p.

Cyr.4 TH5

1. Electrodes, Carbon. 2. Furnaces

ARKHIPOV, V. V.

ARKHIPOV, V. V. -- "INCREASE OF THE DURABILITY OF TROLLEY-CAR TIRES." SUB 29 NOV 52, MOSCOW HIGHWAY INST IMENI V. M. MOLOTOV (DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

137-58-4-6847

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 76 (USSR)

AUTHOR: Arkhipov, V.V.

TITLE: Waelz Processing of Zinc Cake at the im. S.M. Kirov Electrolytic Plant in Chelyabinsk (Vel'tsevaniye tsinkovykh kekov na Chelyabinskom elektrolitnom zavode im. S.M. Kirova)

PERIODICAL: Tr. soveshchaniya po metallurgii tsinka, 1954, Moscow, Metallurgizdat, 1956, pp 218-223

ABSTRACT: The work of the Waelz process department of the im. S.M. Kirov Electrolytic Plant in Chelyabinsk is described.

1. Zinc--Processes

G.S.

Card 1/1

LOVCHIKOV, Vasiliy Semenovich; ARKHIPOV, V.V., kand. tekhn. nauk, dots., otv. red.; GONCHAROVA, I.V., red. izd-va; BOBROV, P.G., tekhn. red.

[Melting of copper and copper-base alloys; third lecture of the course "Production of alloys and ingot casting" for students studying "Founding of ferrous and nonferrous metals and alloys "]Plavka medi i splavov na osnove medi; lektsiia tret'ia po kursu "Proizvodstvo splavov i lit'e slitkov" dlia studentov spetsial'nosti "Liteinoe proizvodstvo chernykh i tsvetnykh metallov i splavov." Moskva, Vses. zaochnyi politekhn. in-t, 1958. 64 p. (MIRA 15:11)
(Nonferrous metals--Founding) (Copper)

25(1) PHASE I BOOK EXPLOITATION SOV/1337

Arkhipov, Vladimir Vasil'yevich; Mikhail Aleksandrovich Kasenkov; Moisey Nissonovich Larin; Yakov Il'ich Ostrovskiy; Kseniya Markovna Pogodina-Alekseyeva; Nikolay Vasil'yevich Sokolov; Gennadiy Dmitriyevich Shevchenko; and Yuriy Vladimirovich Shukhov

Tekhnologiya metallov (The Technology of Metals) Moscow, Mashgiz, 1958. 767 p. 10,000 copies printed.

Eds. (Title page): Sokolov, N.V., Professor and Larin, M.N., Doctor of Technical Sciences, Professor; Eds. (Inside book): Glikin, N.M., Docent; and Brushteyn, B.Ye., Candidate of Technical Sciences, Docent; Tech. Eds.: Uvarova, A.F.; and Sokolova, T.F.; Managing Ed. for Literature on Metal Working and Machine- Tool Manufacture (Mashgiz): Beyzel'man, R D., Engineer.

PURPOSE: This book is intended for students at vtuzes specializing in fields other than machine building.

COVERAGE: This is a textbook presenting basic data on the structure and properties of metals and alloys, as well as methods of producing and processing them.

Card 1/23

The Technology of Metals SOV/1337

Such matters as casting, forging, welding, and heat treatment are discussed. Modern equipment for all types of metal treatment is described. The seven broad divisions of the book are as follows: metallurgy of ferrous and nonferrous metals; essentials of physical metallurgy and heat treatment; casting; metal forming; welding and flame cutting; machining; nonmetallic materials. No personalities are mentioned. There are 33 references, all Soviet.

TABLE OF CONTENTS:

Preface 3

PART I. METALLURGY OF FERROUS AND NONFERROUS METALS

(V. V. Arkhipov, Candidate of Technical Sciences, Docent)

Introduction 5

Ch. I. Fuel and Refractory Materials
1. Fuel 6
2. Refractory Materials 6
10

ARKHIPOV, Vladimir Va[illegible]'yevich, dots; KASENKOV, Mikhail Aleksandrovich, dots., kand. tekhn. nauk; LARIN, Moisey Nisonovich, prof., doktor tekhn. nauk; SOKOLOV, Nikolay Vasil'yevich, prf.[deceased]; SHEVCHENKO, Gennadiy Dmitriyevich, dots., kand. tekhn. nauk; SHUKHOV, Yuriy Vladimirovich, dots., kand. tekhn. nauk; SHCHERBAKOV, G.S., red.

[Technology of metals] Tekhnologiia metallov. [By] V.V. Arkhipov i dr. Izd. 2., perer. Moskva, Vysshaia shkola, 1964. 563 p. (MIRA 17:10)

ARKHIPOV, V. V.

CHEBOTAREV, R. S.,
ARKHIPOV, V. V. and
KOLOSKOVA, V. R.
(Department of Parasitology and Invasive Diseases, Sverdlov Agricultural Institute.) Testing of phenothiazine in the fight against parasitic diseases of animals.

Source: Veterinariya; 22; 6; June 1945 uncl
TABCON

ARKHIPOV, V. V.

PA 190T66

USSR/Medicine (Veterinary) - Infectious Diseases — Mar 51

"On the Possibility of Exterminating the Causative Factor of Anthrax by Planting Certain Crops," V. V. Arkhipov, Cand Vet Sci, L'vov Zoo-Vet Inst

"Veterinariya" Vol XXVIII, No 3, pp 33-35

Found that some crops and grasses (winter wheat, rye, vetch, clover, rhubarb, garlic, and onion) exterminate anthrax bacilli in soil, while others favor their propagation (potato, horse-radish, turnip, radish) or have no effect. Recommends

190T66

USSR/Medicine (Veterinary) - Infectious Diseases (Contd) — Mar 51

planting of clover with timothy, alfalfa (which partly suppresses anthrax bacilli) with rye grass [Lollium perenne L.], vetch with oats, etc., to prevent anthrax.

190T66

ARKHIPOV, V. V.
USSR/Medicine - Veterinary

FD 322

Card 1/1

Author : Arkhipov, V. V., Docent, Candidate of Veterinary Sciences

Title : Problem of disinfection and protection of soil by means of plant cultivation

Periodical : Veterinariya, 6, 53-54, June 1954

Abstract : Experiments were begun about 3 years ago to determine the relationship between various plants and anthrax microbes and eggs of helminths in soil. Preliminary results revealed that certain plants like allium destroy the eggs of helminths. Much remains unsolved.

Institution : L'vov Zoological Veterinary Institute

Submitted :

Arkhipov, V.V.

USSR / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22059

Author : Arkhipov, V.V., Arkhipova, V.R.
Inst :
Title : The Effect of Chlorpicrin on Anthrax Organisms (Communication 1).

Orig Pub: Sb. nauch. tr. Lvovsk. gos. vet. zootekhn. in-ta, 1955, 7, 110-113

Abstract: Up to now there are no reliable chemical substances which disinfect the soil from anthrax organisms. In this connection a study was conducted of the effect of chlorpicrin on the anthrax bacilli. A day-old broth culture of pathogenic anthrax organisms was introduced into 24 agar plates. A solution of chlorpicrin was added to them in increasing quantities. Of the 6 control plates, 3 were planted with a day-old broth culture and 3 with 5 day-old spore culture of anthrax (85-90% spores). Simultaneously 15 test tubes were inoculated with a meat-peptone broth; to 12 of these chlorpicrin was added. The plates and test tubes

Card : 1/2 -52-

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22059

inoculated, both test and control, were incubated for 24 hours at 37°. It was found that chlorpicrin and its vapors destroy anthrax organisms, for neither the test nor the control inoculations (the chlorpicrin vapors penetrated the latter in their joint thermostat position) produced any growth. The test was repeated with this change only, that the control plates and test tubes with the inocula were placed in different thermostats. Under chlorpicrin action the inocula of anthrax bacilli produced no growth, and the guinea pigs and mice infected with this substance died from effects of chlorpicrin, for at dissection there were no signs of anthrax upon morphological and bacteriological examination. The control inoculations showed the characteristic growth of anthrax bacilli and also manifested the specific morphologic picture of anthrax in infected guinea pigs and mice.

ARKHIPOV, V.V., kand.vetnauk; TRZHETSETSKAYA, T.A., nauchnyy sotrudnik

Testing acidified solutions of sodium silicofluoride and hydrogen peroxide for disinfecting skins and hides. Trudy VNIIVSE 13:21-26 '58. (MIRA 11:12)
(Hides and skins--Disinfection) (Silicon fluorides) (Hydrogen peroxide)

ARKHIPOV, V.V., kand.vetnauk; TRZHETSETSKAYA, T.A., nauchnyy sotrudnik

Studies on the disinfection of buildings in anthrax. Trudy VNIIVSE 13:44-49 '58. (MIRA 11:12)
(Anthrax) (Lime, Chloride of)

ARKHIPOV, V.V.

Third plenary session of the Interagency Committee on Research and Methodology in Anthrax Control. Zhur.mikrobiol.epid.i immun. 31 no.11:166-167 N '60. (MIRA 14:6)
(ANTHRAX)

ARKHIPOV, V.V.

Third plenary session of the Interdepartmental Scientific Methodological Commission for the Control of Anthrax. Veterinariia 37 no.8:92-94 Ag '60. (MIRA 15:4)

1. Postoyannyy chlen Mezhvedomstvennoy nauchno-metodicheskoy komissii po bor'be s sibirskoy yazvoy.
(Anthrax--Congresses)

ARKHIPOV, V.V.

Fourth plenary session of the Interdepartmental Scientific Methodological Commission for the Control of Anthrax. Zhur. mikrobiol., epid.i immun. 33 no.4:163-164 Ap '62. (MIRA 15:10)
(ANTHRAX--CONGRESSES)

ARKHANGEL'SKIY, I.I., prof.; DARDA, P.N.; CHISTOV, N.P., kand. veter. nauk; NIKULIN, V.N.; VOROB'YEV, M.M., kand. veter. nauk (Vitebsk, BSSR); ARKHIPOV, V.V., kand. veter. nauk

Infection focuses. Veterinariia 41 no.1:29-33 Ja '64.
(MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy sanitarii (for Arkhangel'skiy). 2. Nachal'nik veterinarnogo otryada postoyanno-deystvuyushchey protivoyashchurnoy ekspeditsii Gosudarstvennogo nauchno-kontrol'nogo instituta veterinarnykh preparatov (for Darda). 3. Leningradskiy nauchno-issledovatel'skiy veterinarnyy institut (for Chistov). 3. Pskovskoye oblastnoye upravleniye proizvodstva i zagotovok sel'skokhozyaystvennykh produktov (for Nikulin).

L 1260-66

ACCESSION NR: AP5024392 UR/0286/65/000/015/0073/0073
615.372.002.2

AUTHOR: Arkhipov, V. V.; Filonov, Yu. A.; Nechayeva, L. A.; Khrushchev, V. G.; Perminov, T. A.; Shevyrev, N. S.; Zolozov, I. S.; Belyayev, A. S.; Nozdrachev, A. I.; Yevglevskiy, A. A.

TITLE: A method for manufacturing tuberculin. Class 30, No. 173381

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 73

TOPIC TAGS: tuberculosis, immunology, allergen

ABSTRACT: This Author's Certificate introduces a method for manufacturing tuberculin. The method consists of growing a tubercular culture on a nutrient medium, removal of the bacterial matter and filtration. An active and specific allergen is produced and labor-consuming operations are reduced by exposing the culture to Co^{60} γ-radiation.

ASSOCIATION: none

SUBMITTED: 11Jun64 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000

Card 1/1

KARAVAYEV, V.M.; ARKHIPOV, V.V.; AL'MEYEV, Kh.Sh., prof.; RATNER, I.M., veter. vrach; VASIL'YEV, N.T., prof.; ORLOV, F.M.

Reviews. Veterinariia 41 no.10:113-117 O '64.
(MIRA 18:11)

ARKHIPOV, V.V.; LUR'YE, L.S.; PROKOF'YEV, N.S.; KHRUSHCHEV, V.G.

Prospects for the use of radiation sterilization in veterinary medicine. Veterinariia 42 no.12:82-84 D '65. (MIRA 19:1)

ARKHIPOV, V.V., inzh.

K-100-61-2 centrifugal compressors. Energomashinostroenie 10 no.2:48 F '64. (MIRA 17:6)

L 14501-66 EWT(m)/T DJ
ACC NR: AP6006344

SOURCE CODE: UR/0413/66/000/002/0066/0066

INVENTOR: Kaplanskiy, A. F.; Gerasimov, B. Ya.; Arkhipov, V. V.

ORG: none

TITLE: Single-stage centrifugal supercharger. Class 27, No. 178014.

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 66

TOPIC TAGS: supercharger, centrifugal supercharger, internal combustion engine

ABSTRACT: The proposed supercharger contains a housing with an impeller and a

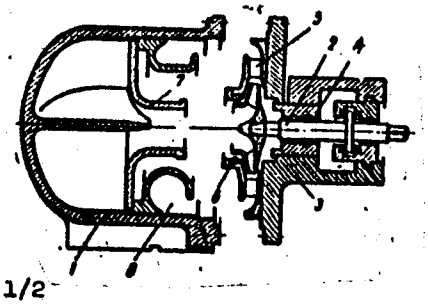


Fig. 1. Supercharger

1 - Housing; 2 - impeller; 3 - cap; 4 - impeller bearings; 5 - vaned diffusor; 6 - covering disk seal; 7 - intake manifold; 8 - pressure chamber.

Card 1/2

UDC: 621.515.5—146.1

L 14501-66

ACC NR: AP6006344

removable circular cap (see Fig. 1). To simplify assembly and regulation of the clearances, the impeller with bearings, the vaned diffusor, and the seal of the covering disk of the impeller wheel are located in the cap, while the intake manifold and pressure chamber are mounted in the housing. Orig. art. has: 1 figure.

[TN]

SUB CODE: 21/ SUBM DATE: 08Apr64/ ATD PRESS: 4199

Card 2/2

ARKHIPOV, Vsevolod Yakovlevich; KULIKOV, Oleg Nikolayevich; CHIZHOV, K., otv.red.; FILIPPOVA, E., red.; LEBEDEV, A., tekhn.red.

[Finance and banks of Indonesia] Finansy i banki Indonezii. Moskva, Gosfinizdat, 1960. 95 p. (MIRA 14:3)
(Indonesia--Finance)

ARKHIPOV, Vsevolod Yakovlevich; PANKIN, M., red.; CHIZHOV, K., red.; NADEZHDINA, A., red.; LEBEDEV, A., tekhn.red.

[Foreign capital in the economy of southeastern Asian countries] Inostrannyi kapital v ekonomike stran IUgo-Vostochnoi Azii. Moskva, Gosfinizdat, 1960. 150 p. (MIRA 14:3)
(Asia, Southeastern--Investments, Foreign)

ARKHIPOV, Vsevolod Yakovlevich; PANKIN, M.S., otv. red.; GARMSEN, O.M., red.; BERESLAVSKAYA, L.Sh., tekhn. red.

[Indonesia in the struggle for economic independence]Indoneziia v bor'be za ekonomicheskuiu samostoiatel'nost'. Moskva, Izd-vo vostochnoi lit-ry, 1963. 77 p. (MIRA 16:3)
(Indonesia—Economic policy)

L 07099-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6029110 SOURCE CODE: UR/0048/66/030/006/0968/0971

AUTHOR: Klyushin, V.V.; Sidorov,S.K.; Kelarev,V.V.; Getman,I.Ya.; Arkhipov,V.Ye.

ORG: Institute of Metal Physics, Academy of Sciences of the SSSR (Institut fiziki metallov Akademii nauk SSSR)

TITLE: Antiferro-ferromagnetic phase transition in the $Fe(Pt_xPd_{1-x})_3$ system [Report, All-Union Conference on the Physics of Ferro- and Antiferromagnetism held 2-7 July 1965 in Sverdlovsk]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 6, 1966, 968-971

TOPIC TAGS: phase transition, ordered alloy, electric resistance, spontaneous magnetization, coercive force, iron alloy, platinum alloy, palladium alloy

ABSTRACT: The $Fe(Pt_xPd_{1-x})_3$ system was selected for investigation in view of its suitability for study of the behavior of the antiferromagnetic-ferromagnetic phase transition. The end compositions - $FePt_3$ and $FePd_3$ - are binary alloys with known properties, which become ordered ($AuCu_3$ type ordering) at 710 and 820°C, respectively. The mixed ternary alloys (with 25 atomic percent iron) are also characterized by $AuCu_3$ type ordering. The investigated compositions are tabulated (16 different specimens); the specimen preparation procedure and the resistivity measurement method were the same as described by V.V.Klyushin, I.Ya.Gotman, V.N.Zubankov, and V.V.Kelarev (Fiz. metallov i metallovedeniye, 21, 153, 1966). The temperatures of the phase

Card 1/2

L 07099-67

ACC NR: AP6029110

transitions were determined from the anomalies in the temperature dependences of the electric resistivity. Also measured were the values of the spontaneous magnetization and the coercive force. These were determined by means of a vibrating magnetometer to within 3% for rod specimens. The composition dependences of the Neel and Curie points, the magnetic moment and the coercive force are presented in figures. A radical change or break in the curves is evinced in the region of 37 to 50 atomic percent Pd. The results and specifically the probable character of the antiferro-ferromagnetic phase transition are discussed at some length. It is concluded that the transition is realized by the process described by S.K.Sidorov and A.V.Doroshenko (Fiz. metallov i metallovedeniye, 18, 811, 1964), involving gradual rotation of the magnetic moments in the entire volume of the specimen or appearance of ferromagnetic phase nuclei in the antiferromagnetic phase and the growth of these nuclei. Which of these mechanisms predominates will be determined in further studies. Orig. art. has: 1 table and 8 figures.

SUB CODE: 20,07 SUBM DATE: 00 ORIG. REF: 005 OTH REF: 007

Card 2/2

ARKHIPOV, V.Ye., inzh.

Utilization of heat from scavenging and drainages of a thermal electric power plant. Elek. sta. 36 no.11:82-83 N '65.
(MIRA 18:10)

ARKHIPOV, V.Ye., inzh.

Automation of the equipment of the turbine section of the Ust'
Kamenogorsk Heat and Electric Power Plant. Elek. sta. 36 no.2:
73 F '65. (MIRA 18:4)

ARKHIPOV, Ye.

Material responsibility and an incentive to harbors for cargo handling. Rech. transp. 21 no.6:17-19 Je '62. (MIRA 15:7)

1. Nachal'nik Glavnogo upravleniya perevozok i ekspluatatsii flota Ministerstva rechnogo flota.
(Harbors)
(Cargo handling)

ARKHIPOV, Ye.

Experience in mechanizing labor-consuming loading and unloading. Mor.i rech.flot 14 no.5:6-8 My '54. (MLRA 7:7)
(Loading and unloading)

SHEVCHENKO, A. (UB5CLX) (Chernovtsy); BASOV, V. (Moskva); PRILUTSKIY, G. (Pyatigorsk); ARKHIPOV, Ye. (Bugul'ma); VYSOCHIN, V. (Moskovskaya obl.); PRIKHUNOV, I. (Moskovskaya obl.); OBLASOV, G. (Kiyev); SMIRNOV, Yu. (UA4YB) (Kanash); KHOKHLOV, B. (Moskva); KHALDEYEV, A. (Przheval'sk); SKOBELEV, I. (Primorskiy kray); PROSKUROV, V. (Irkutsk); DOBRYNIN, Yu. (g.Ivanovo /obl./)

Exchange of experience. Radio no.10:22,26,29,32,37,40,44,46,58 O '64. (MIRA 18:2)

ARKHIPOV, E.I.

25681

Patsional'nyy metod icpravleniya sheek. Kolenchatykh valov dizeley Pytem mekhanicheskogo shabreniya energet byuolleten', 1949, No. 7, s. 7-11.

SO: LETOPIS' No. 34

ARKHIPOV, Yevgeniy Mikhaylovich; SHAVERDOVA, A.I., red.; FEKLISOVA, T.D., tekhn.red.

[Along the roads of Egypt] Po dorogam Egipta. Moskva, Gos. izd-vo "Fiskul'tura i sport," 1959. 123 p. (MIRA 12:6)
(Egypt--Description and travel)

ARKH.POV, Ye.P.

Rare case of perforation of a gastric ulcer in a child; abstract.
Khirurgiia 34 no.12:96 D '58. (MIRA 12:1)

1. Iz khirurgicheskogo otdeleniya 2-go bol'nichno-poliklinicheskogo ob'yedineniya Bugul'my.
(PEPTIC ULCER)

ARKHIPOV, Ye.P.

Case of cholelithiasis in congenital absence of the gall bladder. Kaz.-med.zhur. 40 no.2:70 Mr-Ap '59. (MIRA 12:11)

1. Iz khirurgicheskogo otdeleniya (zav. otdeleniyem - G.M. Kuznetsov) 2-go bol'nichno-poliklinicheskogo ob"yedineniya g. Bugul'my (glavvrach - A.P.Shchekotolo).
(CALCULI, BILIARY)

ARKHIPOV, Ye.P.; ZABIROV, K.S.; KUZNETSOV, G.M.

Stomach resection in congenital by anomalous location of the intestines. Kaz. med. zhur. no.6:64-65 N-D '60. (MIRA 13:12)

1. Khirurgicheskoye otdeleniye (zav. G.M. Kuznetsov) 2-go bol'nichno-poliklinicheskogo ob"yedineniya Bugul'my (glavvrach - A.P. Shchekotolo).
(STOMACH—SURGERY) (INTESTINES—ABNORMITIES AND DEFORMITIES)

ARKHIPOV, Ye.P. (Bugul'ma, Tatarskoy ASSR)

Hypnosis in surgical practice. Kaz. med. zhur. no.1:74-75 Ja-F '62. (MIRA 15:3)

(HYPNOTISM--THERAPEUTIC USE)
(SURGERY)

ARKHIPOV, Ye.P.; ZABIROV, K.S.; KUZNETSOV, G.M.

Resection fo the stomach for a congeintal anomali in the position of the intestines. Vest.khir. no.9:132-133 '61. (MIRA 15:3)

1. Iz khirurgicheskogo otdeleniya (zav. - G.M. Kuznetsov) 2-go bol'nichno-poliklinicheskogo otdeleniya g. Bugul'my.
(INTESTINES--ABNORMITITES AND DEGORMITIES) (STOMACH--SURGERY)

ARKHIPOV, Ye.P.; KUZNETSOV, G.M.

Use of N.G.Belen'kii's serum for hemostasis in surgical wounds. Kaz.med. zhur. no.2:71-72 Mr-Ap'63 (MIRA 16:11)

1. Khirurgicheskoye otdeleniye (zav. - G.M.Kuznetsov) 2-go bol'nichno-poliklinicheskogo ob"yedineniya Bugul'my 'glavnyy vrach - A.P.Shchekotolo).

*

ARKHIPOV, Ye.P. (Bugul'ma, Tatarskoy ASSR, ul. Gogolya, 4C)

Nonparasitic cyst of the liver associated with calculous cholecystitis. Vest. khir. 92 no.5:81 My '64.

(MIRA 18:1)

1. Iz khirurgicheskogo otdeleniya (zav. - Ye.P. Arkhipov) 2-go bol'nichno-poliklinicheskogo ob"yedineniya (glavnyy vrach - A.P. Shchekotolo) g. Bugul'my.

NIKIFOROV, Vasiliy Fedorovich, kand.tekhn.nauk; KAPELLO, I.A., red.; SHTENTSEL', V.K., retsenzent; ARKHIPOV, Ye.Ye., retsenzent; MAKKUSHINA, A.N., red. izd-va; BOBROVA, V.A., tekhn.red.

[Waterways and harbors] Vodnye puti i porty. Pt.3.[River ports] Rechnye porty. Moskva, Izd-vo "Rechnoi transport," 1958. 370 p. (MIRA 11:12)

(Harbors)

OBERMEYSTER, Arkadiy Mikhaylovich; SMIRNOV, Yevgeniy Vasil'yevich; ARKHIPOV, Ye.Ye., retsenzent; GRINEVICH, G.P., retsenzent; RODIONOV, S.I., red.; ALEKSEYEV, V.I., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Over-all mechanization and automatization of loading and unloading operations in transportation] Kompleksnaia mekhanizatsiia i avtomatizatsiia peregruzochnykh rabot na transporte. Moskva, Izd-vo "Rechnoi transport," 1960. 84 p. (MIRA 14:1)

(Transportation) (Material handling)

YERMAKOV, Serafim Fedorovich; SIDOROV, P.P., red.; ARKHIPOV, Ye.Ye., retsenzent; LOBANOV, Ye.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Guide to the establishment of norms for loading and unloading operations] Posobie normirovshchiku pogruzochno-razgruzochnykh rabot. Moskva, Izd-vo "Rechnoi transport," 1961. 136 p. (MIRA 14:7)

(Loading and unloading)

SMIRNOV, Yevgeniy Vasil'yevich, kand. tekhn. nauk; AL'TSHULER, Yakov Yeremeyevich, insh.,; ARKHIPOV, Ye.Ye., retsenzent; ANTONOV, M.P., red.; FEDYAYEVA, N.A., red. izd-va; BODROVA, V.A., tekhn. red.

[Hoisting devices for cranes] Gruzozakhvatnye ustroistva dlia kranov. Moskva, Izd-vo "Rechnoi transport," 1961. 161 p. (MIRA 14:9)
(Cranes, derricks, etc.)

ARKHIPOV, Yu., inzh.-elektrik, assistent

Operation of two d.c. propeller motors on a single generator during maneuvering. Mor. flot 18 no.4:11 Ap '58. (MIRA 12:12)

1.Odesskoye vysshaye morekhodnoye uchilishche.
(Ship propulsion, Electric)

05734
SOV/32-25-10-23/63

28(5)
AUTHORS: Gorfinkel', B. I., Arkhipov, Yu. A.

TITLE: Dynamic Method of Investigating Gas Separation

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1213-1214 (USSR)

ABSTRACT: Several authors (Ref 1) investigated the gas separation from various bodies in the vacuum. These tests were, however, carried out under stationary conditions. As it is also necessary to examine rapid processes under nonstationary conditions, a dynamic method of investigating the total gas separation was developed. The device used (Fig 1) includes a vacuum system (with 2 vacuum pumps), a vacuum furnace (in which the sample is heated by sending through a high-frequency current), as well as a pressure gage transmitter and the measuring device. A resistance pressure gage especially adjusted for low-pressure measurements was used as a pressure gage transmitter. The pressure gage is a balloon with water cooling having a tungsten wire (cross section 3 × 50 μ, length 70 mm) inside. The pressure gage transmitter showed a practically linear dependence between pressure and discharge signal (in the range of $1 \cdot 10^{-2}$ to 10 μHg). Maximum sensitivity of the pressure gage I = 2.4 ma/μHg . The

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diagram of the measuring arrangement (Fig 2) shows that a loop oscillograph of type MPO-2 is used. The signal is obtained proportional to the rate of pressure variation by means of a differentiating circuit. Equations are indicated for computing the results from the signals obtained, as well as two oscillograms (Fig 3) obtained in gas separations from a nickel-, and an aluminized iron lamina (0.2 mm thick) at 800°. The maximum rate of gas separation was determined with 0.095, and 0.18 Hg/sec cm^2, respectively. There are 3 figures and 1 Soviet reference.

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AUTHOR: Cheremushkina, A. V.; Arkhipov, Yu. N.

ORG: Department of Magnetism (Kafedra magnetizma)

TITLE: Temperature dependence of the Hall effect and of the electric resistance in Fe-Si-Al alloys of the 'Sendast' type

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 2, 1966, 93-96

TOPIC TAGS: Hall effect, resistivity, temperature dependence, iron nickel alloy, permalloy, magnetic anisotropy, magnetostriction

ABSTRACT: This is a continuation of earlier work (FTT v. 6, 539, 1964) where it was shown that in iron-nickel alloys the small bodies of the ferromagnetic Hall constant and small values of the magnetic anisotropic constant have approximately similar compositions (approximately 80% nickel). The present research was carried out on Fe-Si-Al alloys similar in their behavior to permalloy in that they have small magnetic anisotropy and magnetostriction. The preparation of the samples is described. The Hall emf was measured by a procedure given in an earlier paper (Vestn. Mosk. un-ta, ser. fiz., astron., no. 2, 7, 1957: no. 1, 7, 1958). The resistivity was measured with a potentiometer in the same samples. Measurements at high temperatures were made

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in a vacuum of 10^{-2} -- 10^{-3} mm Hg. The results show that in the temperature range 20 -- 500C, the ferromagnetic Hall constant R_s and the electric resistivity ρ are connected by the relation $R_s = a\rho + b\rho^2$, the parameters a and b being functions of the alloy composition. Both parameters are found to be dependent on the relative concentrations of the components, a being larger for alloys with larger electric resistivity and being one order of magnitude smaller than for Fe and Fe-Si and Fe-Al alloys. In some of the alloys, b was close to zero, just as in permalloy. The results agree with the theory proposed for this phenomenon by Ye. I. Kondorskiy (ZhETF no. 6, 2085, 1964). The authors thank Professor Ye. I. Kondorskiy for suggesting the topic and discussing the results. Orig. art. has: 4 figures, 3 formulas, and 2 tables.

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