L 9378-66    EWT(d)/FBD/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWA(d)/T-2    IJP(c)
ACC NR: AP5026928    GW/BC/WH    SOURCE CODE: UR/0373/65/000/005/0047/0055

AUTHORS: Kan, V. L.; Kel'zon, A. S.

ORG: none

TITLE: Solution of a pursuit problem

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 5, 1965, 47-55

TOPIC TAGS: ship navigation, tracking system, spacecraft tracking, differential equation

ABSTRACT: It is desired to determine analytical expressions describing trajectories which a moving object (e.g., a ship) can follow in order to intercept another object moving with given uniform velocity. Using the method of proportional navigation (H. Spitz. Partial navigation courses for a guided missile attacking a constant velocity target. Naval Research Laboratory, USA, 1946), the problem is solved for general values of the navigational constant b (i.e., b $\neq$ 2). Solutions of the differential equations of motion are discussed with regard to questions of stability and whether or not interception is achieved for a given set of initial parameters. Exact solutions are obtained in a number of examples, and the effect of the velocity ratio p (p = $v/v^o$, where $v^o$ is the velocity of the uniformly moving object, and v the

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ACC NR: AP5026928

velocity of the pursuer) is investigated. The work is a continuation of previously published research of V. L. Kan and A. S. Kel'zon, (Issledovaniye obshchey zadachi proportsional'nogo sblisheniya. Nauchn. tr. Ministerstva Morskogo flota SSSR, Izd-vo "Morskoy transport", 1964, No. 1). Orig. art. has: 5 figures and 64 formulas.

SUB CODE: /7, 01/     SUBM DATE: 18Jan65/  ORIG REF: 005/         OTH REF: 002

Card 2/2

ACC NR: AP6002318                    SOURCE CODE:    UR/0373/65/000/006/0042/0048

AUTHORS: Kel'zon, A. S. (Leningrad); Pryadilov, V. I. (Leningrad)

ORG: none

TITLE: Elimination of dangerous vibrations in high speed vertical rotors

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 6, 1965, 42-48

TOPIC TAGS: vibration analysis, vibration damping, centrifuge, vibration test, resonance phenomenon

ABSTRACT: Vibrations generated during the high speed rotation of a gyroscopic centrifuge were studied analytically and experimentally. The centrifuge rotor is rigidly supported from the bottom and has an elastic support at the top. The shaft and the disk on top of it are assumed to rotate as one unit under small forcing functions with friction acting as a damping agent. The solution of the resulting differential equations leads to the following resonance condition

$$r_{1_\bullet} = \sqrt{y_{1_\bullet}{}^2 + z_{1_\bullet}{}^2} = \frac{2m\epsilon bi\,(c_1 l^2 - Ql_4)}{n\sqrt{4\,(B-A)\,(c_1 l^2 - Ql_4) - n^4}} \,,$$

Experimental investigations were performed on a special rotor where speeds could be altered continuously up to 16 000 rev/min. Two types of shaft support conditions were tested. One, with both top and bottom supports rigid (115 kg/cm), and the

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ACC NR: AP6002318

other with the top support somewhat elastic (65 kg/cm). The results were given as vibrograms and amplitude-frequency characteristics curves. These curves show the onset of the first resonance at 1800 rpm, 10% higher than the calculated value, and the second resonance at 5250 rpm. For the case of all-rigid supports, the centrifuge failed above 5000 rpm, indicating the need for an elastic support at the shaft top. A support that is 7 to 10 times more elastic than the shaft itself is considered to be satisfactory. It was also found that the above vertical rotor can be operated up to speeds of 15 600 rpm with minimum amplitude oscillations. The authors express sincere thanks to V. A. Zyablikov for taking part in designing the centrifuge. Orig. art. has: 8 formulas and 8 figures.

SUB CODE: 13, 20/ SUBM DATE: 28Oct64/ ORIG REF: 012

Card 2/2

ACC NR: AP6002306    (N)    SOURCE CODE: UR/0141/65/008/006/1229/1243

AUTHOR: Kan, V. L.; Kel'zon, A. S.

ORG: none

TITLE: Qualitative investigation of the trajectory in proportional navigation

SOURCE: IVUZ. Radiofizika, v. 8, no. 6, 1965, 1229-1243

TOPIC TAGS: navigation, proportional navigation

ABSTRACT: Suggested by H. Spitz, the method of proportional navigation (Naval Res. Lab, USA Report, 1946) involves this set of equations for straight-line motion of point A:

$$\dot{\psi} = b\dot{\eta},$$
$$\dot{a} = v_s \cos \eta - v \cos \gamma,$$
$$a\dot{\eta} = v \sin \gamma - v_s \sin \eta.$$

Here, a is the range (distance A—B), $\eta$ is the angle of the line of sight, $\psi$ is the angle of B velocity vector, $\gamma$ is the lead angle, and b is the navigational constant; $v_s$ and v are the velocities of points A and B, respectively. The problem is to find the relative trajectory of B assuming that both velocities are constant. The closed solution of the above set of equations can be represented by the roots of $f(\eta)$; however, such roots essentially depend on

Card  1/2                                      UDC: 531.1:656.6

ACC NR: AP6002306

the system parameters.  Hence, the present article gives only a qualitative investigation of trajectories for any positive integer b > 2, and lists all possible cases with any initial conditions for b = 3.  It is shown, among other things, that the case of b = 2, on which all of Spitz' conclusions were based, is an exception because, in this case, 2(b - 1) = 2, and the number of roots is always 2.  Orig. art. has: 10 figures, 29 formulas, and 2 tables.

SUB CODE: 17 / SUBM DATE: 04Dec64 / ORIG REF: 005 / OTH REF: 001

Card 2/2 mcp

L 37692-66    EWT(m)/T    WW/DJ

ACC NR: AP6021820          (N)              SOURCE CODE:   UR/0413/66/000/012/0113/0113

INVENTOR:  Kel'zon, A. S.; Pryadilov, V. I.

ORG:  none

TITLE:  Sliding bearing / Class 47, No. 182968 [announced by Leningrad Higher Engineering Marine School im. Admiral S. O. Makarov (Leningradskoye vyssheye Inzhenernoye morskoye uchilishche)]

SOURCE:  Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 113

TOPIC TAGS:   bearing, sliding bearing

ABSTRACT:  This Author Certificate introduces a sliding bearing consisting of a housing and a bushing.  The bushing wall contains a row of longitudinal grooves. For greater resistance to vibration, the outer surface of the bushing has juts with radial holes connected with grooves and holding pins, which are mounted on the bearing housing.  Orig. art. has:  1 figure.                    [SA]
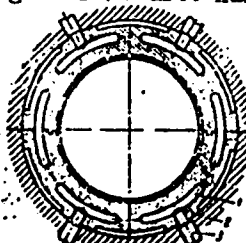
Fig. 1.  Sliding bearing

1 - Grooves; 2 - juts; 3 - pins.

SUB CODE:  13/  SUBM DATE:  25Feb65/  ATD PRESS:
UDC:  621.822.5

Card 1/1

KEL'ZON, L.F.

Determining proteins and their fractions by the biuret reaction.
Vop.med.khim. 4:205-208 '52. (MIRA 11:4)

1. Biokhimicheskaya laboratoriya Leningradskogo instituta
khirurgicheskogo tuberkuleza.
(BIURET REACTION)

It was not a new. It was somewhat later in the later
stages of the disease

20514
S/114/61/000/005/002/003
E194/E435

b. 2/22

AUTHOR:     Kel'zon, R.A., Engineer

TITLE:      The Calculation of the Geometrical Characteristics of
            Turbine Blade Profiles by Means of Simpson's Rule

PERIODICAL: Energomashinostroyeniye, 1961, No.5, pp.10-12

TEXT:    In designing turbine blades, it is necessary to know such
geometrical characteristics as the area, the position of the centre
of gravity and the angle between the main axes of inertia and a
reference axis.   The usual method of doing this, which consists
in sub-dividing the curvilinear figure into small trapezia, has a
number of disadvantages, it is laborious and not very accurate.
Provided that the curves that make up the blade profile can be
represented by equations, Simpson's rule can be applied to make
calculations of the geometrical characteristics entirely
analytical and much more accurate.   The laborious calculations can
be greatly speeded up by the use of a computer and using a digital
computer type ЭВ-80-3 (EV-80-3) the characteristics of 50 - 100
profiles can be calculated to an accuracy of 0.1 to 0.2% in 10 to
12 working days.   The time required for the calculations does not

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The Calculation of ...

much depend upon the number of blade profiles and, therefore, it is disadvantageous to make calculations on less than 8 - 10 of them at once.    This article describes the method of calculating profile characteristics by means of Simpson's rule and gives a brief analysis of the results of the calculations.   Fig.1 shows the system of coordinates and notations used in deriving the formulae for area and moments of inertia.   The geometrical characteristics are easily derived if the following are known:  the profile area $F$, the static torques $S_z$, $S_u$ relative to the coordinate axes $z$ and $u$ and also the axial $J_z$, $J_u$ and centrifugal $J_{zu}$ moments of inertia of the profile relative to the axes.   Integral formulae are derived for the areas and torques as they have a number of advantages over the formulae generally used.   The following formulae are then readily derived:

$$F = \int_a^b (u_1 - u_2)\, dz; \tag{1}$$

$$S_z = \frac{1}{2} \int_a^b \left(u_1^2 - u_2^2\right) dz; \tag{2}$$

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..ie Calculation of ...

$$S_u = \int_a^b (u_1 - u_2)\, z\, dz; \qquad (3)$$

$$J_j = \frac{1}{3}\int_a^b \left(u_1^3 - u_2^3\right) dz; \qquad (4)$$

$$J_u = \int_a^b (u_1 - u_2)\, z^2\, dz; \qquad (5)$$

$$J_{zu} = \frac{1}{2}\int_a^b \left(u_1^2 - u_2^2\right) z\, dz. \qquad (6)$$

In turbine blades the curves $u_1(z)$ and $u_2(z)$ are usually made
up of arcs of circles and straight lines.  The integrals in
Eq.(1) to (6) are conveniently calculated by Simpson's rule
dividing up the area of integration in the usual way and Simpson's
rule is applied in the form of the following equation

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The Calculation of ...

$$\int_a^b \varphi(z)\,dz \approx \frac{b-a}{n}\left[\varphi(a) + 4\varphi(z_1) + 2\varphi(z_2) + 4\varphi(z_3) + \right.$$

$$\left. +\cdots + 2\varphi(z_{n-2}) + 4\varphi(z_{n-1}) + \varphi(b)\right]. \qquad (9)$$

(9)

A further auxiliary equation is also derived for the purpose of
assessing the error in the calculation.  The coordinates of the
centre of gravity, the position of the main axes of inertia and of
the main central moments of inertia are then readily determined.
The following procedure is used in applying the formulae to make
the necessary calculations.  The initial data are prepared in the
form of tables containing values of the radii and coordinates of
the centres of all those parts of the blade contour that are made
up of circular arcs.  The straight line sections are given in
terms of the coordinates of two points or the coordinates of one
point and the angle of slope to a coordinate axis.  The coordinates
of points of intersection between different sections of the contour
are also given in the table if they have been previously
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calculated, otherwise they are determined by means of a computer. Then the computer makes the calculations by the formulae given in the article and produces the results.    In evaluating the integral equations (1) to (6) by Simpson's rule, the interval of integration is divided into 100 equal parts and then the error in the formulae is about 0.1 to 0.2%.   This is the order of error of the entire calculation which is carried out to 4 - 6 significant figures, though greater accuracy can be achieved.   It is pointed out that for profiles for which the dimensions $y_1$ and $y_2$, Fig.3, are small compared with the chord, a difference between the minimum axis and the tangent of 3 - 4° has the result that the difference between the inlet and outlet moments of resistance is as much as 20 to 30%.   The ordinary semi-graphical method of calculation gives the arithmetic mean of these values and so the error is of the order of 10 to 15%, and may reach 20%.   This error is important and may explain certain cases of blade failure. By using Simpson's rule to calculate the geometrical characteristics of turbine blade profiles, all these magnitudes including the angle of slope of the minimum axis of inertia may be calculated to any required degree of accuracy.   There are Card 5/6

*Kel'zon U. S.*

KEL'ZON, .iktor Saulovich, kand.tekhn.nauk; NEPOMNYASHCHIY, Samuil Isaakovich, inzh.; DOBROKHOTOV, Yuriy Sergeyevich, kand.tekhn. nauk; UDAL'TSOV, A.N., glavnyy red.; TOLCHINSKIY, Ye.M., inzh. red.

[Miniature self-balancing electron bridge. Differential thermometer with photographically recorded readings] Malogabaritnyi samobalansiruiushchiisia elektronnyi most. Differential'nyi termometr s fotograficheskoi zapis'iu pokazanii. Moskva, 1956. 12 p. (Pribory i stendy. Tema 4, no.P-56-470)

(MIRA 11:2)

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

(Thermometers)

KEL'ZON, V.S.

Precision in radio direction finding and the most efficient carrier
frequency in radiosondes. Trudy NIIGMP no.4:65-74 '57.   (MIRA 11:2)
          (Radiosondes)   (Radio direction finders)

KEL'ZON, V.S.; NEPOMNYASHCHIY, S.I.

Aircraft automatic electronic bridge. Trudy NIIGMP no.4:114-119 '57.
(Meteorology in aeronautics--Equipment and supplies)    (MIRA 11:2)

SHTEYN, Mukhin Iosifovich; ANDRIYEVSKIY, M.N., retsenzent; KULANIN, V.S., retsenzent; KIL'ZON, V.A., red.; GRIGOR'YEV, Ye.N., red.; VOIKOVA, N.M., red.; KORUZEV, N.N., tekhn. red.; SMUROV, B.V., tekhn. red.

[Elements of calculating ultra-shortwave transmitters] Elementy rascheta radioperedatchikov ul'trakorotkikh voln. Moskva, Izd-vo "Sovetskoe radio," 1958. 461 p.
(MIRA 11:10)
(Radio, Shortwave—Transmitters and transmission)

SOV-109-3-6-6/27

AUTHORS: Polyak, Yu. V. and Kel'zon, V. S.

TITLE: Theory of the Detection of Periodic Signals in Gaussian
Noise during Non-Coherent Storage (Integration)
(K teorii obnaruzheniya periodicheskikh impul'snykh
signalov v gaussovom shume    pri nekogerentnom nakoplenii)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 6,
pp 764-769 (USSR)

ABSTRACT: It is assumed that the fluctuation noise at the r.f. output of
a narrow band receiver can be expressed as Eq.(1) where
$U_\omega$ is the instantaneous value of the noise voltage, $E_\omega$
is the envelope, $\omega_0$ is the resonant frequency of the system,
and $\varphi$ is the initial phase. If the desired signal is in
the form expressed by Eq.(2), the resulting signal at the
receiver can be expressed as:

$$U_{c\omega} = E_{c\omega}\cos(\omega_0 t + \theta) \qquad , \qquad (3)$$

where $E_{c\omega}$ is the envelope of the resulting waveform and
$\theta$ is the combined phase of the waveform. The probability
density distribution for the envelope is given by Eq.(4),

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Theory of the Detection of Periodic Signals in Gaussian Noise during
Non-Coherent Storage

where $\quad v_i = \dfrac{E_{c\omega}}{\sigma}$ , $\quad a = \dfrac{E_c}{\sigma}$ and $\sigma$ is the $\checkmark$ an

square value of the noise. In the absence of the desired
signal, the probability of the appearance of a pulse is
expressed by Eq.(5), while the probability of the detection
of a pulse in the presence of the signal is expressed by
Eq.(6). Both equations are valid for the system without
storage or averaging facilities and $v_o$ represents the

triggering level of the output device of the receiver. If
the receiver stores N pulses the respective probabilities
can be expressed by:

$$P_\omega = \int_{v_o}^{\infty} \varphi_\omega (z)dz \quad ; \quad (7) \qquad P_c = \int_{v_o}^{\infty} \varphi_{c\omega} (z)dz \quad ; \qquad (8)$$

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Theory of the Detection of Periodic Signals in Gaussian Noise during Non-Coherent Storage

where $\varphi_{uu}(z)$ is the probability density distribution for the sum of $N$ random variables and $\varphi_{cuu}(z)$ is the probability density distribution for the sum of $N$ signal-noise variables. If the receiver has a square detector, the problem can be analysed by finding the distribution density of a quantity:

$$\sum_{n=1}^{N} v_n^2 \tag{9}$$

where: $v^2 = v_1^2 + v_2^2 + \ldots + v_N^2;$   $v^2 = x;$   $v_1^2 = x_1, \ldots;$

$x = x_1 + x_2 + \ldots + x_N$ . The distribution function for $x$ is then (Ref.3) in the form of Eq.(10). For $N < 50$ the probabilities $P_c$ and $P_{uu}$ are then expressed by Eqs.(14), while for $N > 50$ , $P_{uu}$ and $P_c$ are in the form of Eqs.(15). In the case of a receiver fitted with a linear

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Theory of the Detection of Periodic Signals in Gaussian Noise during Non-Coherent Storage

detector, $P_w$ for $N > 8$ can be expressed by Eqs.(19) while $P_c$ is in the form of Eq.(20). For $N = 2$ it is possible to find an exact expression for $P_w$ ; the relationship between $P_c$ and $P_w$ for this case is shown graphically in Fig.2. Further results of the analysis are represented graphically in Figs.2 and 3; Fig.2 represents the relationship between the signal/noise ratio and the number of pulses $N$ for $P_c = 0.5$ and $P_w = 10^{-10}$ ; Fig.3 gives the dependence between $N$ and the signal/noise ratio for $P_c = 0.9$ and $P_w = 10^{-7}$ ; the full curves relate to the linear detector while the dashed curves refer to the receiver fitted with a square detector. From the above it is concluded that the minimum detectable signal is almost independent of the

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SOV-109-3-6-6/27

Theory of the Detection of Periodic Signals in Gaussian Noise during Non-Coherent Storage

  type of detection (square or linear). The paper contains 3 figures, 1 table and 5 references, 4 of which are English and 1 Soviet.

SUBMITTED: February 5, 1957

   1. Radio signals - Theory 2. Noise (Radio) - Theory 3. Radio
    receivers - Performance 4. Mathematics - Applications

Card 5/5

SHTEYN, Naum Iosifovich [deceased]; KEL'ZON, V.S., red.; BORUNOV, N.I., tekhn. red.

[Harmonic self-oscillator] Avtogeneratory garmonicheskikh kolebanii. Moskva, Gos.energ. izd-vo, 1961.  622 p.                    (MIRA 14:7)
(Oscillators, Electric)

DROBYSHEVSKIY, V.; BOLDYREV, A.; RFPIN, A.; FEFER, A.; KEM, A. (Chelyabinsk).

Suggested, developed, introduced.  Izobr.i rats.  no.4:32  Ap '60.
(MIRA 13:6)

(Technological innovations)

KEM,A.M., inxh.

Self-unloading car-bin. Suggested by A.M.Kem. Rats.i izobr.
predl. v stroi.   no.10:42-44   '59.              (MIRA 12:11)

1. Po materialam tresta Bazstroy Sverdlovskogo sovnarkhoza.
   (Loading and unloading--Equipment and supplies)

REPIN, Anatoliy Aleksandrovich; KHRUSTALEV, Nikolay Vladimirovich;
KEM, Aleksandr Yegorovich; SVET, Ye.B., red.; KUZNETSOVA,
O.Ya., tekhn. red.

[Anticorrosive acid-resistant materials and coatings in
industrial construction in the Urals] Antikorroziinye
kislotoupornye materialy i pokrytiia v promyshlennom
stroitel'stve Urala.  Cheliabinsk, Cheliabinskoe knizh-
noe izd-vo, 1963.  154 p.                (MIRA 17:1)
    (Ural Mountain region—Industrial buildings)
        (Corrosion-resistant materials)
            (Protective coatings)

KEM, I.I.

Poorly filled ears in spring durum wheat.  Zashch. rast. ot vred.
1 bol. 9 no.7:15  '64.                                    (MIRA 18:2)

1. Zaveduyushchiy laboratoriyey zashchity rasteniy Orenburgskoy
opytnoy stantsii.

L 45512-66    EWT(d)/EWT(m)/EWP(h)/T-2/EWP(w)    IJP(c)    EM

ACC NR: AT6018248                    SOURCE CODE:  UR/3021/64/000/259/0163/0167

AUTHORS: Burkova, M. V.; Gerasina, S. A.; Dzhordzhio, V. A.; Dzhurayev, A. D.;
Kem, L. I.; Neushkin, A. I.; Petrosyants, M. A.; Ubaydullayeva, I.; Romanov, N. N.

ORG:  none

TITLE:  Some statistical data on the bumps of the TU-104 aircraft

SOURCE: Tashkent, Universitet, Nauchnyye trudy, no. 259. Fizicheskiye nauki, no.
23, 1964. Fizika atmosfery i aviatsionnaya meteorologiya (Physics of the atmosphere
and aviation meteorology), 163-167

TOPIC TAGS:  aircraft, wind direction, wind velocity, statistic analysis, meteor-
ologic observation / TU-104 aircraft, IL-18 aircraft

ABSTRACT:  The results of about 900 special research flights with TU-104 aircraft
and a smaller number of flights with IL-18 aircraft are given. The routes were
Tashkent to Novosibirsk, Tashkent to Moscow, and Tashkent to Simferopol'. Three
problems are considered: the flight conditions as a function of wind velocity,
of wind direction, and of the angle between the fuselage of the aircraft and the
wind vector. It is found that there is no statistical confirmation for the hypoth-
esis that there is a genetic relationship between a strong bump and zones of moderate
gales. In the zones of winds with a southern component, a strong bump is observed

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ACC NR: AT6018248

approximately five times more frequently than in winds with a northern component. The popular hypothesis that the probability of encountering a bump zone is greater in flights where the angles to the air stream are great is refuted by the data obtained. Orig. art. has: 3 tables.

SUB CODE: 04, 01/ SUBM DATE: none/ ORIG REF: 001

hs

Card 2/2

KEMARSKAYA, A.F., kand.med.nauk

Splenectomy in patients with liver cirrhosis. Vest.khir.
90 no.3:110-111 Mr'63.                              (MIRA 16:10)

1. Iz gospital'noy terapevticheskoy kliniki pediatricheskogo
i sanitarno-gigiyenicheskogo fakul'teta (zav. - prof. A.A.
Oks) Odesskogo meditsinskogo instituta imeni N.I.Pirogova
(rektor - prof. I.Ya. Deyneka).
          (LIVER—SIRRHOSIS)  (SPLEEN—SURGERY)

KEMARSKIY, B.A., insh.; ROGOVIN, D.A., inzh.

Using semiautomatic welding in carbon dioxide in the
manufacture of thin-sheet metal structures. Svar. proizv.
no.9:33-34 S '64. (MIRA 17:12)

1. Mogilevskiy zavod pod"yemno-transportnogo oborudovaniya.

KEMARSKIY, V., inzh. (g.Kiyev)

Time relay using MTKh-90 devices.   Radio   no.7:45-46   Jl  '61.

(MIRA 14:10)

(Electric relays)

KEMARSKIY, V.N.

Abstracts. Ortop., travm. i protez. 25 no.11:69  N '64.
(MIRA 18:11)

1. Iz Vtoroy Gor'kovskoy oblastnoy bol'nitsy imeni Vladimirskogo
(glavnyy vrach - Ye.I. Mal'tsev), Arzamas. Adres avtora  Arzamas,
Gor'kovskoy oblasti, Vtoraya oblastnaya bol'nitsa. Submitted
December 12, 1963.

KEMARSKIY, V.N. (Arzamas, Gor'kovskoy obl., ul. Revolyutsii, d.22-B,
kv.15)

Pneumatic tourniquet for conducting intraosseous anesthesia.
Ortop., travm.i protez. 23 no.6:58-59 Je '62.     (MIRA 15:9)

1. Iz ortopedicheskogo detskogo otdeleniya (zav. - V.N. Kemarskiy)
Gor'kovskoy 2-y oblastnoy bcl'nitsy im. M.F. Vladimirskogo
(glavnyy vrach - Ye.I. Mal'tsev).
        (ANESTHESIOLOGY—APPARATUS AND INSTRUMENTS)

TARASOV, A. M., SVESHNIKOV, D. A., KEMAYEV, P. G.

Shot peening

Assembly for testing shot for fragility and evaluating the quality of the shot.  Vest.
mash. 31, No. 10, 1951.

9.  Monthly List of Russian Accessions, Library of Congress, September, 1952.  Unclassified.

KEMAYEV, S., gvardii starshiy leytenant

Simpler and more expedient. Voen.vest. 43 no.10:112-113 O '63.
(MIRA 16:12)

SERWINSKI, Mierczyslaw, prof. dr.; KEMBLOWSKI, Zdzislaw, dr

Heat penetration in the flow of aqueous suspensions of low
concentration pulp fibers.  Przegl papier 20 no.9:278-281  S '64.

1. Department of Chemical Engineering, Technical University,
Lodz.

SERWIŃSKI, Mieczysław; KEMBŁOWSKI, Zdzisław

Heat penetration during the flow of coarse-grained
suspension in a tube. Pr.1. Chemia. stosow 7 no.3:
315-332 '63.

1. Katedra Inzynierii Chemicznej, Politechnika Lodz, i Zaklad
Inzynierii Chemicznej i Konstrukcji Aparatury, Polska  Akademia
Nauk, Gliwice.

SERWINSKI, Mieczyslaw, prof. dr.; KEMBLOWSKI, Zdzislaw, dr.;

Penetration of heat during the flow of aqueous suspensions
of cellulose fibers. Przegl papier 19 no.12: 376-379 D'63.

1. Katedra Inzynerii Chemichnej, Politechnika, Lodz.

KEMEL'BAYEV, O.; SHKURIN, V.N., kand.tekhn.nauk

Geometric study of the shape and bedding conditions of an ore body.
Sbor. nauch. trud. Kaz GMI  no.19:218-222  '60.       (MIRA 15:3)
(Ore deposits)

KEMELEV, A.A.

"An Investigation of the Procedure of Groupped Agricultural
Water Pipes and Methods for Computing Their Long-Range Regulation";

dissertation for the degree of Candidate of Technical Sciences
(awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,
1963, pp 232-236)

KEMELEV, A.A., inzh.

Group systems of water supply in agriculture. Gidr. i mel. 13
no.11:36-46 N '61.                                          (MIRA 14:10)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya
im. K.A. Timiryazeva.
                    (Water supply, Rural)

KARAMBIROV, N.A., kand. tekhn. nauk; KEMELEV, A.A., kand. tekhn. nauk

Many-day regulation of rural group water-supply systems.
Gidr. i mel. 15 no.8:33-42 Ag '63.                  (MIRA 16:8)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya
im. Timiryazeva.

SONGINA, O.A.; KEMELEVA, M.G.; KOZLOVSKIY, M.T.

Using electrolytically generated permanganate ions for coulometric titration. Zav. lab. 23 no.8:896-900 '57.          (MIRA 10:11)

1. Kazakhskiy gosudarstvennyy universitet.
        (Iron--Analysis)   (Titration)   (Permanganates)

Kemeleva, N. G.

32-8-2/61

AUTHORS: Songina O. A., Kemeleva N. G., Kozlovskiy M. T.

TITLE: The Use of Electrolytically Produced Permanganate Ions for the Purpose of Coulombometrical Titration.
(Primeneniye elektroliticheski generirovannogo permanganat-iona dlya tseley kulonometricheskogo titrovaniya - Russian)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 8, pp 896-900 (USSR)

ABSTRACT: The above-mentioned titration is used for the determination of a minimum foreign content in pure metals and permits to determine the content of an admixture of the order $10^{-12}$ g-ekv sufficiently rapid and accurate, in which connection an automatic control of the process is also made possible. The scientists Tutuntsich and Mladenovich proposed to use the permanganate ions that were electrolytically produced from the solutions of manganese sulfate in the coulombometrical titration. These scientists also found out that the production may best be carried out when the acid content of the solution is 4-10.n. In the work this is practiced within the limits 7-10.n of sulfuric acid, and for comparison processes were also carried out at 1-n $H_2SO_4$. In the section "The volt-ampere curve $Fe^{2+}$ and $Fe^{3+}$" it is shown that on an internal reagent production in the presence of the same electrolyzer different ions can be determined.

Card 1/2

32-8-2/61

The Use of Electrolytically Produced Permanganate Ions for the Purpose of Coulombometrical Titration.

It is proved here that beside $Mn^{2+}$ and $MnO_4$ ions in the solution $Fe^{2+}$ and $Fe^{3+}$ ions may also occur. In the next section entitled "Coulombometric titration of iron" the mentioned process is described in connection with the application of a special apparatus (a scheme is given). By an illustration the application of a special electrolyzer which is used in this connection is described. This electrolyzer permits up to 15 determinations per hour. The conclusion is drawn that the titration of 6 to 56 $\gamma$-iron in the described manner yields accurate results. In the case of smaller quantities the possibility of errors increases. With regard to the use of the electrolytically produced permanganate ion it is said that it is rendered difficult in iron determinations due to the reversibility of the system $Fe^{2+}/Fe^{3+}$, but that it is simple when the latter is absent.
(There are 6 illustrations, 1 table, 8 references).

ASSOCIATION: Kazakh State University.
(Kazakhskiy gosudarstvennyy universitet).

AVAILABLE: Library of Congress.
Card 2/2

KEMELEVA, Z.Kh.; BEKTUROV, Ye.A.

Osmotic pressure in solutions of macromolecular compounds containing low-molecular fractions. Trudy Inst. khim. nauk AN Kazakh. SSR 11:141-146 '64.
(MIRA 17:11)

L 19771-65    EWT(m)/EWF(c)/EPA(w)-2/T    Pr-4/Pab-IO    RWH/WW

BEKTUROV, Ye.A.; KEMELEVA, Z.Kh.; DAVYDOVA, Ye.G.

Viscosity and molecular weight of low molecular polymethyl methacrylate. Izv. AN Kazakh. SSR. Ser. khim. nauk 15 no.1: 38-41 Ja-Mr '65.                                    (MIRA 18:12)

1. Submitted Oct. 1, 1964.

BEKTUROV, Ye.A.; KEMELEVA, Z.Kh.; MUSABEKOV, K.B.

    Ebullioscopic method of determining the molecular weight of
    resinous asphaltene substances. Izv. AN Kazakh.SSR.Ser.khim.
    nauk 15 no.3:37-39 Jl-Ag '65.

                                                  (MIRA 18:11)

    1. Submitted October 1, 1964.

VOLODIN, N.P., KEMEL'MAN, A.M.

Swine - Ukraine

25 pigs from a sow in one year.  Sots. zhiv. 14 no. 3, 1952.

1. KEMEL'MAN, A. M.

2. USSR (600)

4. Swine

7. 276 pigs from 10 sows, Sots. zhiv., 15, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, ___April,___ 1953, Uncl.

KROL', L.B., kand.tekhn.nauk; KEMEL'MAN, G.N., inzh.; KORETSKIY, A.S., inzh.

    Study of the temperature control of superheated steam with recircula-
    tion of gases. Teploenergetika 8  no.5:39-45 My '61.
                                   (MIRA 14:8)

    1. Vsesoyuznyy teplotekhnicheskiy institut.
                   (Boilers)

KEMEL'MAN, G.N., inzh.; KROL', L.B., kand.tekhn.nauk

Study of means for the regulation of secondary steam superheating
in a 200 Mw. block.  Elek. sta. 33 no.10:8-16  D '62. (MIRA 16:1)
(Electric power plants)

KROL', L.B., doktor tekhn. nauk; KEMEL'MAN, G.N., inzh.; MEN'KOV, N.N., inzh.

Experimental study of a component of a steam-to steam
intermediate superheater.  Teploenergetika 11 no.5:11-18
My'64.                                          (MIRA 17:5)

1. Vsesoyuznyy teplotekhnicheskiy institut.

KROL', L.B., doktor tekhn. nauk; KEMEL'MAN, G.N., inzh.; MEN'KOV, N.N., inzh.; PAYMUKHIN, V.B., inzh.

Experimental study of intermediate superheating control using steam-to-steam heat exchangers. Teploenergetika 12 no.4:18-24  Ap '65.
(MIRA 18:5)

1. Vsesoyuznyy teplotekhnicheskiy institut i Zainskaya gosudarstvennaya rayonnaya elektrostantsiya.

*K E A1 b F A1 A1 A1, A1 A1* 

Subject     :  USSR/Engineering

AID P - 790

Card 1/1     Pub. 28 - 5/5

Authors     :  Alenchikov, S. I., Grishin, F. N. and Kemel'man, M. N.

Title       :  Improving the quality of the evaporator distillate by the "BPK" film separator

Periodical  :  Energ. byul., #2,  31-33,  F 1954

Abstract    :  This "film" separator for the purification of boiler feed water was designed by the Experimental Division of the Bureau of Uniflow Boiler Construction (BPK).  The rotation of the wet steam admitted separates water particles and causes the formation of film on the wall of the separator.  Construction and operation of the two-stage separator are described and supplemented with the test results.  2 drawings and one table.

Institution :  None

Submitted   :  No date

KEMEL'MAN, M.N.

AID P - 2325

Subject       :  USSR/Engineering

Card 1/1      Pub. 110-a  -  6/17

Authors       :  Alenchikov, S. I., and M. N. Kemel'man, Engs.

Title         :  Installation of separators for improvement of the vapor
                 extracted from the ISV-type evaporators

Periodical    :  Teploenergetika,  5,  31-33,  My 1955

Abstract      :  A brief description of the installation is given.  The
                 experimental results are discussed and summed up in a
                 table.  The advantages of using special separators with
                 ISV-evaporators are stressed.

Institution   :  Office of Once-Through Boiler Construction

Submitted     :  No date

64C

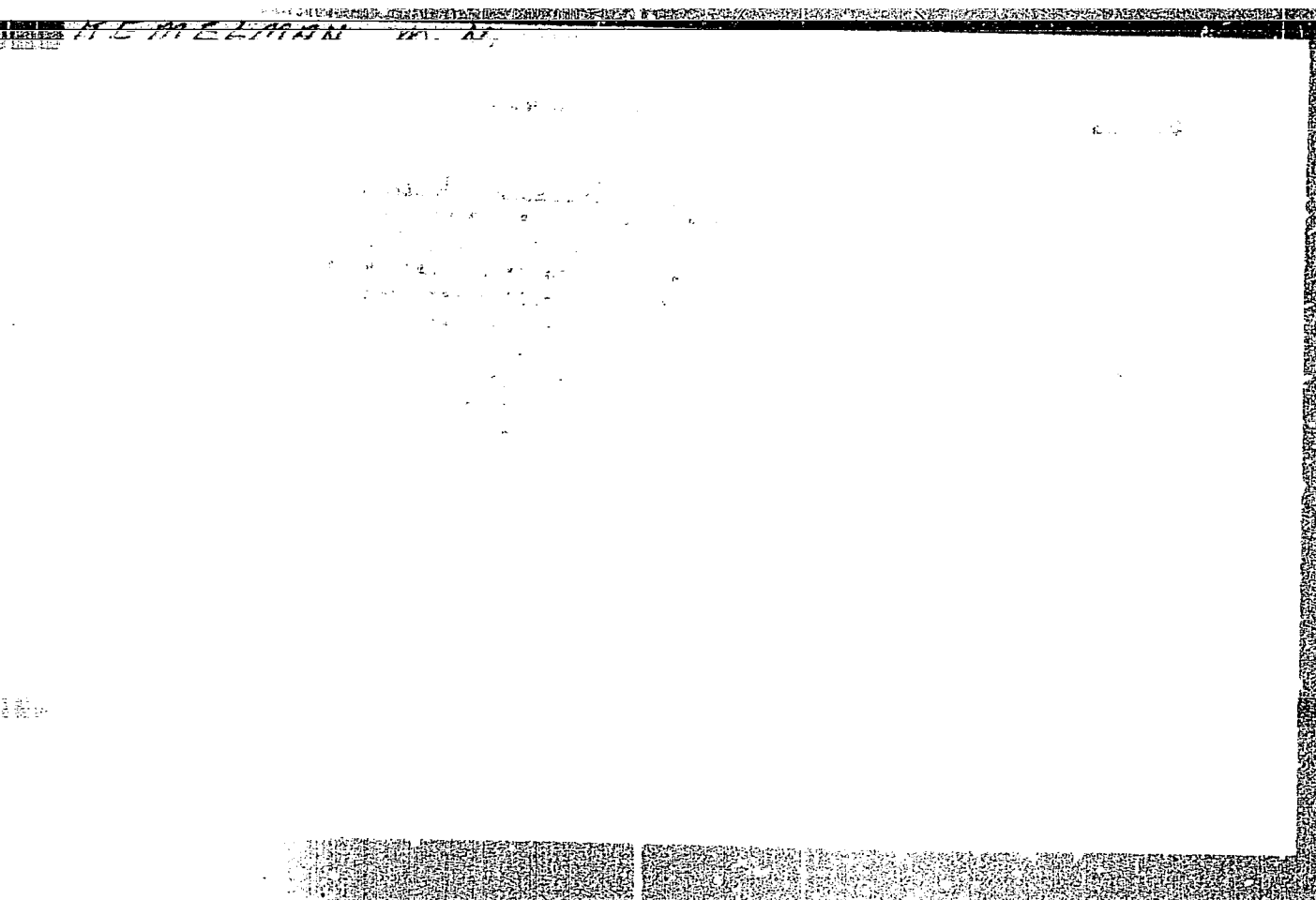AUTHOR: Kemel'man, M.N., Engineer. (Moscow Division Central Boiler and Turbine Institute)

TITLE: A new method of increasing the effectiveness of centrifugal separation. (Novyy metod povysheniya effektivnosti tsentrobezhnoy separatsii).

PERIODICAL: "Teploenergetika" (Thermal Power), 1957, Vol. 4, No. 6, pp. 17 - 21, (U.S.S.R.)

ABSTRACT: At the present time, uniflow boilers use small centrifugal separators in which the flow is made to rotate by using a tangential-screw blade entry. These separators are suitable for emergency unloading circuits, for water discharge and steam washing of uniflow boilers, in cases when 10 or 15 fold reduction in the wetness of the separated steam is sufficient. In the separator designed by this Institute, the wet steam enters through a tangential inlet on to a screw blade located in the upper cylindrical part of the separator which ensures smooth rotary flow. The water that is separated on the walls of the active part drops into a drainage chamber formed by the central exhaust of dry steam and the body of the separator and is removed from the separator. Separation takes place only because of centrifugal force. The maximum efficiency of such a separator is shown on a graph to be 97 to 98%.
In some cases even such a comparatively high efficiency is far from sufficient. In particular, for separation on uniflow boilers the efficiency should be considerably higher. The problem therefore arises of greatly increasing the efficiency

A new method of increasing the effectiveness of centrifugal separation. (Cont.)

of centrifugal separation. A formula is given for the minimum diameter of particles separated in relation to the angular velocity, from which it follows that with increase in angular velocity the size of the minimum diameter of particles separated is reduced. Since the angular velocity for a given diameter of separator is proportional to the inlet speed it would seem that higher inlet speeds would give higher efficiencies. However, rig tests show that increase in the speed beyond a certain point reduces instead of increasing the efficiency. This occurs because, as the speed of the steam-water mixture is increased, the disperse composition of the liquid phase changes and the higher centrifugal force does not suffice to remove the smaller drops.

The formula also shows that separating efficiency might be improved by reducing the diameter of the separating element and increasing the time of separation. Reduction of the separator diameter makes it necessary to increase the number of elements. To increase the separation time it is necessary to increase the length but this is not efficient because friction forces reduce the rate of rotation and this results in return of water. Therefore, there is an optimum length of separator. Tests carried out at a pressure of 100 atm. show that a

Card 2/5

A new method of increasing the effectiveness of centrifugal separation.  (Cont.)

separator achieves maximum efficiency with a ratio of length/ diameter = 2.5.  It is of no help to connect separators of the same type in series because they are of low efficiency with low water content.  Work was therefore undertaken to find new ways of increasing the efficiency of centrifugal separation.
    There is an analogy between the settling of drops in centrifuging and the settling of drops in a stationary medium.  The main difference is that in the one case centrifugal force and in the other gravity is operative.  A formula is quoted for the case of settling from a stationary medium to determine the change of concentration of particles of a given radius with time.  The concentrations diminish exponentially with time at a rate that depends on the particle radius.  Therefore, the concentration of suspension by weight in the settling chamber will increase towards the bottom, which in this case is the surface of deposition.  By analogy it may be supposed that in the case of centrifugal separation there is also an increase in concentration of the separated medium in the direction of action of the force, which is radial.  Therefore, the steam in the central part of the tube should be dry.  This principle may be used in the design of new centrifugal separators in which the dry steam which requires no further treatment by the separator is separated from wetter steam which goes for further separation. A separator of this kind may be called a fractional separator.
    Tests were carried out on a model of a fractional separator.

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A new method of increasing the effectiveness of centrifugal separation.  (Cont.)

The upper part has the usual tangential nozzle and screw blade, and the steam removal arrangement consists of a number of concentric chambers with independent steam removal.  The experimental model had six chambers of which the last served to remove water deposited on the walls.  In the experimental rig the steam is cooled and then the flow is split.  One part goes to the mixing device and a second part is condensed and is also passed to the mixing device where the flows of steam and condensate are mixed to form wet steam.  A measured quantity of salt solution is included in the steam.  The steam is then passed through an auxiliary separator of high efficiency and the water removed there, which contains salt in solution, passes through a water trap and can be directed into a measuring tank through a cooler.  A quantity of this water from the water trap is carefully measured and injected into the main flow of dried steam.  In this way the desired wetness of the steam before the separator under test can be established exactly. From the annular chambers of the fractional separator the steam passes through condensers to measuring tanks from which samples are taken for analysis.  The wetness of the steam before the separator was determined from the salt content of the wet steam before the separator and the content of the separated water. The steam dryness was also determined from the quantity of

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A new method of increasing the effectiveness of centrifugal separation. (Cont.)
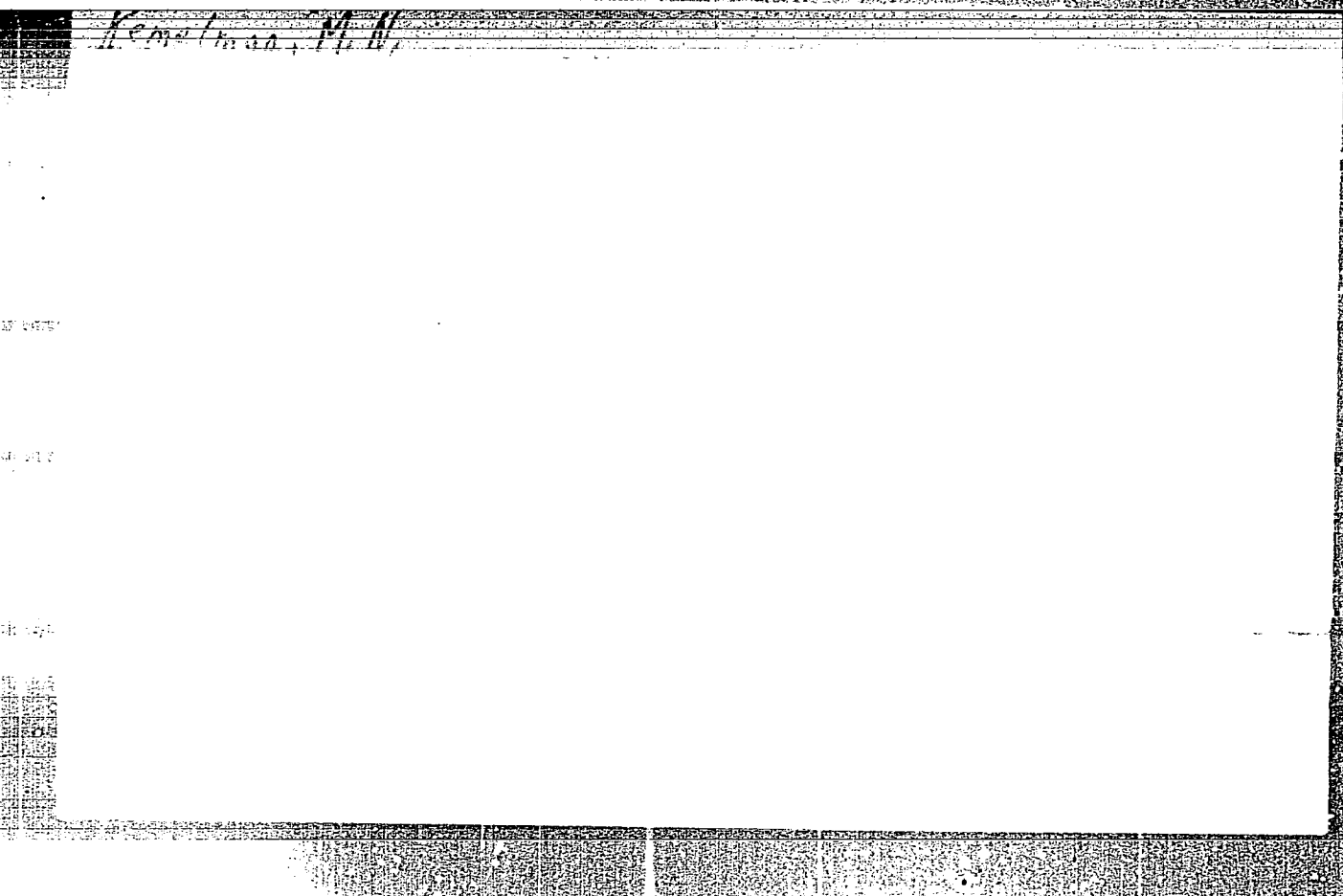
water injected and the agreement was good. The results of the tests are given in the form of a graph of the total amount of salt carried over as a function of the distance from the separator axis. The data relate to a pressure of 100 atm. with a steam flow of 1 300 to 1 400 kg/hr and wetnesses of 3% and 11%. The results of a large number of experiments confirm that on centrifugal separation the wetness of the steam increases in the direction from the axis of the separator to the walls. This was confirmed by control tests using radio-active isotopes. Detailed test results carried out on a model 84 mm diameter are given in a table and it is shown that the amount of salt in the first and second chambers is extremely small.

It is concluded that during the centrifugal separation of steam the value of the wetness varies according to a parabolic type curve across the section of the separator. The steam in the central part of the separator is dryest. Using a fractional separator in which separation takes place only by centrifugal force the coefficient of carry over of water drops may be reduced to less than 0.004 to 0.007%. A rational design of centrifugal separator is one in which the flow of steam with minimum wetness, which requires no further drying, is separated from wetter steam which is itself treated in a further separator.
5 figures, 2 literature references (one Russian).

KEMEL'MAN, M.N., Cand Tech Sci--(diss) " Linear separation of

steam and new ways of increasing its effectiveness." Mos, 1958.

16 pp (Min of Higher Education USSR. Mos Order of Lenin Power

Engineering Inst), 100 copies (KL,25-58, 113)

— 97 -

KEMEL'MAN, M.N., kand. tekhn. nauk; ESKIN, N.B., inzh.

Results of investigations of a device for enriching samples of
superheated steam. Izv. vys. ucheb. zav. energ. 3  no.2:92-98
F '60.                                          (MIRA 13:2)

1.Moskovskoye otdeleniye TSentral'nogo kotloturbinogo instituta im.
I.I. Polzunova.  Predstavlena prezidiumom Nauchno-tekhnicheskogo soveta.
                (Steam, Superheated)

KEMEL'MAN, M.N.; TARATUTA, V.A.; ESKIN, N.B.

Thermal and chemical testing of an experimental UG-2.6/39 once-through
type waste-heat boiler. Prom.energ. 16 no.5:3-8 My '61.

(MIRA 14:7)

(Boilers—Testing)

SHMIDT, Ya.A.; KEL'TSEVA, O.B.; SIMONOVA, N.I.

  Use of nitro paraffins in the production of caprolactam.   Khim.prom.
  no.1:15-17   Ja  '62.                                      (MIRA 15:1)
              (Azepinone)        (Paraffins)

KEMEL'MAN, M.N., kand.tekhn.nauk; ESKIN, N.B., inzh.

System of fractional separation with re-circulation.  Energomashino-
stroenie  8  no.3:21-23  Mr  '62.                          (MIRA 15:2)
                        (Boilers)

ABRAMOV, V.I., inzh.; KRAMEROV, A.Ya., inzh.; RYABOVA, G.N., inzh.;
    SURNOV, A.V., inzh.; KEMEL'MAN, M.N., kand. tekhn. nauk

Some experimental data on steam entrapment in the lowering section
of a circulatory stage.  Teploenergetika 10 no.8:46-50 Ag '63.
                                                    (MIRA 16:8)
1. Moskovskoye otdeleniye TSentral'nogo nauchno-issledovatel'-
skogo kotloturbinnogo instituta imeni Polzunova.
                    (Boilers)

KEMEL'MAN, M.N., kand. tekh.n. nauk; KOSTINSKAYA, N.V., inzh.; RYABOVA, G.N., inzh.

Takeoff of an all-level sample of wet steam. Elek. sta. 35 no.7: 24-28 Jl '64. (MIRA 17:11)

KEMEL'MAN, M.N., kand. tekhn. nauk; SURNOV, A.V., kand. tekhn. nauk;
RYABOVA, G.N., inzh.

Some laws governing steam trapping in the lowering sector of a circulation
stage. Izv. vys. ucheb. zav.; energ. 8 no.6:35-39 Je '65.    (MIRA 18:7)

1. Moskovskoye otdeleniye TSentral'nogo kotroturbinnogo instituta imeni
Polzunova, Leningrad.

S/058/63/000/002/006/070
A059/A101

AUTHORS:      Bedike, T., Gelberg, A., Grabari, V., Kemen', P., Tripa, A.

TITLE:        Apparatus for the measurement of the $\beta\gamma$-correlation with circular polarization

PERIODICAL:   Referativnyy zhurnal, Fizika, no. 2, 1963, 53 - 54, abstract 2A366
              ("Rev. phys. Acad. RPR", 1962, v. 7, no. 2, 165 - 171)

TEXT:         A general-purpose apparatus is described to measure the angular
correlation which is equipped with a magnetic analyzer for the measurement of the
circular polarization of $\gamma$-quanta. A study of the $\beta\gamma$correlation with the measure-
ment of the circular polarization is of interest in the case of allowed $\beta$-transi-
tions in which the interference elements of a Fermi and Gamov-Teller matrix can
take place, since, in this way, information can be obtained on the rules governing
the selection according to isotopic spin. The study of the forbidden first-order
$\beta$-transitions is also interesting, in particular when a deviation from the shape
of the allowed $\beta$-spectrum is observed. The radioactive $\beta$-source and a stilbene
crystal used to record the $\beta$-particles are contained in an aluminum vacuum

Card 1/2

Apparatus for the measurement of the...

S/058/63/000/002/006/070
A059/A101

chamber. The $\beta$-particle detector can rotate around an axis passing through the source. The source was applied to an aluminum foil $1.5\,\mu$ thick. The circular polarization of the $\gamma$-quanta was measured by way of $\gamma$-ray forward scattering on magnetized iron of the magnetic analyzer. This method of measuring the polarization is shown to be the best in the $\gamma$-quanta energy range examined (0.1 to 1.5 Mev). In order to increase the light intensity, the magnetic analyzer was constructed in the form of a toroid made of Armco iron magnetized with an internal coil. The toroid was disposed in such a way that the radioactive source and the $\gamma$-quanta detector (a NaI crystal) are on its axis, with a lead screen provided between the source and the scintillator so that only those $\gamma$-quanta could reach the detector which had been scattered by the walls of the magnetized toroid. The $\beta$-particles and the $\gamma$-quanta were recorded using a fast-coincidence device with the resolution $2\tau = 32$ nsec. The amplitudes of the pulses from the dynodes of the photoelectric amplifier were picked up with a single-channel analyzer and fed to slow coincidences with the pulse from the fast-coincidence circuit. In order to reduce errors due to the slow changes in the parameters of the electronic devices, the direction of the current in the magnet was changed every 2 to 3 minutes with a chronometrically controlled automatic system. With this device, the circular polarization of the $\gamma$-quanta produced in the $\beta$-decay of $Au^{198}$ was measured.
[Abstracter's note: Complete translation]                    L. Landsberg
Card 2/2

L 44632-66

ACC NR: AP6033121                              SOURCE CODE:  HU/0012/65/013/010/0308/0313

AUTHOR:  Kemeny, Tamas—Kemen', T. (Graduate mechanical engineer; Graduate electrical engineer)

ORG:  Central Research Laboratory for Measurement Technology (Merestechnikai Kozponti Kutato Laboratorium)

TITLE:  Electronic container scales

SOURCE:  Meres es automatika, v. 13, no. 10, 1965, 308-313

TOPIC TAGS:  electronic equipment, data processing

ABSTRACT:  Balances designed for weighing the contents of silos and similar containers by means of an electronic system, developed and manufactured by Scale Works (Merleggyar) in Hodmezovasarhely, were described. The precision weighing transducer cells, forming the basis of the balances, are manufactured by MOM Kalibergyar (MOM Calibre Factory) [location not given]. The design principles employed in the development of these balances were discussed and some models were described and illustrated. The digital output of the balances can be coupled to data-processing installations. Orig. art. has: 16 figures. [JPRS: 33,541]

SUB CODE:  09  /  SUBM DATE:  12Apr65  /  ORIG REF:  006  /  SOV REF:  001
OTH REF:  008

UDC:  681.26:621.3082.77

Card 1/1      blg

KEMENCI, Bela

Structural appearances in the black malleable casting.
Ljevarstvo 10  no. 5/6:110-120  '63.

1. "Pobeda", Novi Sad.

KEMENCI, Bela, inz.

Deoxidation of the black malleable casting from cupola
furnaces with aluminum. Ljevarstvo 10 no.1/2:31-40 '63.

DANK, Viktor, Dr. (Hungary); KEMENCI, Ruza [translator]

The subsurface and geologic relations of the southern part
of the Great Hungarian Plain. Nafta Jug  14 no.5/7:153-160
My-Jl'63.

KEMENES, Arzen; SZEMKEO, Gaspar

Cable railways and tourism. Kozleked kozl 19 no.15:231-235 14 Ap '63.

KEMENES, Arzen, okleveles mernok

Dropping tests performed on protective bridges built over railways and higways. Melyepitestud szemle 13 no.2/3: 109-117 F-Mr '63.

1. Kozlekedes- es Postaugyi Miniszterium I. Vasuti Foosztaly foeloadoja.

KEMENES, B.

How work in foundries is promoted by standards.   p. 102.
Vol 5, no. 7/8, July/Aug. 1953.  SZABVANYOSITAS.  Budapest, Hungary.

So:   Eastern European Accession.  Vol 5, no. 4, April 1956

POZSONYI, Qabor, dr.; KEMENES, Frigyes

The 4th International Colloquium on Film Technology.  Kep hang 5 no.6:
178-179 D '59.

1. "Kep- es Hangtechnika" szerkeszto bizottsagi tagja (for Pozsonyi).
2. Magyar Televisio, Budapest (for Kemenes).

KEMENES, F.

Case of coccidiomycosis in a rabbit in Hungary. Acta microb. hung.
2 no.1-2:191-194 1954.

1. Institut fur Seuchenlehre der Veterinarmedizinischen Hochschule,
Budapest.
        (COCCIDIOMYCOSIS
            in rabbit)
        (RABBITS, dis.
            coccidiomycosis)

*KEMENES N. F.*

HUNGARY / Microbiology. Microbes Pathogenic to Humans and          F-3
Animals.

Abs Jour   : Ref Zhur - Biol., No 2, 1958, No 5333

Author     : Kemenesh, F.
Inst       : Not given
Title      : Types of Leptospira in Hungary.

Orig Pub   : Magyar allatorv. lapja, 1956, 11, No 8-9, 283-287

Abstract   : Six types of leptospirosis stimulants have been recorded in
             Hungary up to the present: Leptospira pomona, L. hyos (mi-
             tis), L. sejroe-hebdomadis, L. grippotyphosa, L. icterohae-
             morrhagie, and L. canicola. Of these, L. pomona is of
             prime significance. This type causes mass abortions among
             pigs, and among artificially fed calves an increase in tem-
             perature accompanied by hemoglobinuria, yellow jaundice and
             sometimes cattle plague; among young pigs, large horned
             cattle, horses, and humans, it normally produces a "sound"

Card       : 1/2

HUNGARY / Microbiology. Microbes Pathogenic to Humans and          F-3
          Animals.

Abs Jour    : Ref Zhur - Biol., No 2, 1958, No 5333

          leptospirosis. Frequently, L. hyos and L. pomona are found
          simultaneously and sometimes such an infection leads to a-
          bortion. Infection by L. sejroe-hebdomadis of farm animals
          passes without symptoms. The author has few observations
          so far on infection of farm animals by L. grippotyphosa.

Card        : 2/2

HUNGARY/Diseases of Farm Animals - Diseases Caused by          R-2
          Bacteria and Fungi.

Abs Jour    :  Ref Zhur - Biol., No 4, 1958, 16917

Author      :  Hirt, G., Kasza, L., Kemenes, F.
Inst        :  -
Title       :  Equine Leptospirosis in Hungary.

Orig Pub    :  Magyar allatorv. lapja, 1957, 12, No 1-2, 2-9.

Abstract    :  In Hungary, horses become infected with leptospirosis
               through diseased swine and cattle, and therefore its
               principal causative agent in horses is Leptospira pomona.
               In single cases L. sejroe-hebdomadis, L. hyos, and even
               L. grippo-typhosa could be detected. 5 to 60% of the
               horses of the country are carriers of the symptomless in-
               fection. In some cases the disease is manifested clini-
               cally by a 2-6 day rise of temperature, sluggishness,
               refusal to eat, catarrh of the conjunctiva, presence of
               blood and albumen in the urine, and jaundice.

Card 1/2

3685. LEPTOSPIRAL SEROTYPES IN HUNGARY - Kemenes F. Inst. of
    Epizootiol., Veter. Coll., Budapest - ACTA VET. ACAD. SCI. HUNG. 1958.
    8/1 (43-51) Tables 3
In Hungary the occurrence of 7 leptospiral types has been established, viz.: L.
pomona. L. hyos (mitis). L. sejroe. L. saxkoebing. L. grippotyphosa. L. ictero-
haemorrhagiae and L. canicola. By the author 59 leptospiral strains were isolated
in culture from domestic animals and man (mostly from urine). Thirty-six of
them proved to be L. pomona (17 from swine. 10 from cattle. 5 from horse. 2
from man, 1 from dog. and 1 from rat), 15 L. hyos (all from swine). 5 L. sejroe
and saxkoebing (1 from horse, 2 from man, and 2 from rats). and 3 L. canicola
(from dogs). L. pomona was responsible for abortions in sows on a larger scale.
haemoglobinuria accompanied by febrile state, jaundice, and occasional deaths in
artificially reared calves. In pigs, cattle and horses, as well as in man, it gener-
ally gives rise to 'benign' forms of leptospiroses. L. hyos in combination with L.
pomona not infrequently induces double infection in swine, and occasionally calls
forth by itself abortions in sows. Infections with L. sejroe and saxkoebing do not
appear to cause clinical diseases in domestic animals. Insufficient data are as
yet available about the infection of domestic animals with L. grippotyphosa. In
Budapest 5 to 30% of dogs were found infected with L. canicola.

BERTOK, Lorand, dr.; KEMENES, Ferenc, dr.; SZARKA, Geza, dr.

A case of laboratory infection with Leptospira canicola adapted
to rodents. Orv.hetil. 101 no.48:1711-1713 27 N'60.

1. Az Allatorvostudomanyi Foiskola Jarvanytani Intezete es a
Magyar Nephadsereg Egeszsegugyi Szolgalata.
      (LEPTOSPIROSIS case reports)
      (OCCUPATIONAL DISEASES case reports)

BERTOK, Lorand; KEMENES, Ferenc; SIMON, Gyorgy

Effect of methionine deficiency on antibody formation. Kiserl. orvostud. 14 no.2:217-222  Ap '62.

1. Allatorvostudomanyi Foiskola Jarvanytani Intezete, Magyar Tudomanyos Akademia Allategeszsegugyi Kutato Intezete es Budapesti Orvostudomanyi Egyetem Korelettani Intezete.

(ANTIBODIES)   (METHIONINE defic)

HUNGARY

KEMENES, F., BOKORI, J., KARSAI, F., SURJAN, J.; Institute of Epizootiology (Director: MANNINGER, R., professor) and Clinic of Internal Diseases (Director: KOCSY, J., professor) of the Veterinary College and "Phylaxia" State Serum Institute (Director: MOLNAR, J.) [Hungarian version not given], Budapest.

"Leptospira Canicola-Induced Abortion in Swine in Hungary."

Abstract: [English article; Authors' English summary] Abortions in a group of sows in advanced stages of pregnancy on a collective farm were found to have been caused by Leptospira canicola. Levaditi's method revealed the presence of these pathogenic agents in the fetal organs. It was also isolated from the urine of one of the aborting sows. Epizootiological and extensive serological evidence showed the farm to be exclusively infected with L. canicola. The finding seems to bear out the authors' inference from experi-
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KEMENES, F.

On the occurrence of infections caused by two or three various leptospira types in Hungary. Acta veter Hung 12 no.2:101-115 '62.

1. Institut fur Seuchenlehre (Direktor: Prof.R.Manninger) der Veterinarmedizinischen Hochschule in Budapest.

DOZSA, Istvan; KEMENES, Ferenc; SZENT-IVANYI, Tamas

Investigations on the role of red corpuscles of mammals to
identify species. Allattani kozl  48  no.1/4:37-42  '61.

1. Allatorvostudomanyi Foiskola Jarvanytani Tanszeke, Budapest, es
Fovarosi Tanacs VB Allatkerti Allatorvosi Rendeloje, Budapest.

HUNGARY

KALLAI, L., KEMENES, P., and VIZY, L., of the Institute of Epizootiology
(Director: R. MANNINGER), Veterinary University, Budapest, the Institute
of Nutrition (Director: R. TARJAN), Budapest, and the State Institute
of Veterinary Hygiene (Director: T. KADAR), Budapest. [Original versions
not given].

"Studies on the Leptospira Icterohemorrhagiae Infection of Experimental
Rats"

Abstract [Authors' English summary]: Leptospira icterohemorrhagiae in-
fection has been observed in several experimental rat colonies of various
laboratories in Budapest. Adult rats were the primary source of infection.
These leptospira-carriers did not respond adequately to terramycin treat-
ment. The offspring of seropositive mothers were, however, found to re-
tain passive (maternal) immunity for at least one month. Accordingly,
after weaning, the young animals were raised in leptospira-free environ-
ment and so the propagated generations were free from infection. [16
references, mainly Western].[Article in English].
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of leptospirae were obtained. 2 Hungarian, 8 Western references.
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HUNGARY

MIKLOVICH (Mrs), KIS CSATARI, Marta, Dr. KEMENES, Ferenc, Dr; Veterin... Medical University, Department of Epidemiology (chairman: MANNINGER, Rezso, Dr, professor, academician) and National Animal Hygiene Institute (director: KADAR, Tibor, Dr, candidate of veterinary sciences) (Allatorvostudomanyi Egyetem Jarvanytani Tanszeke es Orszagos Allategeszsegugyi Intezet).

"Comparative Study on the Antibiotical and Chemotherapeutical Treatment of Borreliosis (Spirochaetosis) in Fowl."

Budapest, Magyar Allatorvosok Lapja, Vol.18, No 7, July 63, pages 265-267.

Abstract: [Authors' English summary modified] Comparative studies have been carried out on the treatment of septicemia caused by Borrelia anserina on chicks. Oil and water suspensions of oxytetracycline and chloramphenicol, crystalline streptomycin, penicillin, Atoxyl Supraseptyl and Furazolidone were tested. Acute infection develops in 3-4 day-old chicks infected experimentally, to which they all succumb within 7-9 days. The following doses were effective for the treatment of the infection: oxytetracycline in both oily and crystalline form, 1.5-10 mg/chick, penicillin 10,000 U/chick, streptomycin 10 mg/chick; among the chemotherapeutical preparations, Atoxyl 2 mg/chick subcutaneously. Preparations of chloramphenicol in doses of 5-10 mg/chick showed no satisfactory effectiveness. Supraseptyl and Furazolidone were completely ineffective. Field experiences showed that a single dose of 10 mg/kg body weight of Tetran was as effective as crystalline penicillin in doses of 20,000-40,000 U/kg body weight. 9 Western, 2 Hungarian references.

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KALLAI, L.; KEMENES, F.; VIZY, L.

Studies on the Leptospira icterohaemorhagiae infection of experimental rats. Acta microbiol. acad. sci. hung. 9 no.4:311-315 '62/63.

1. Institute of Epizootiology (Director: R. Manninger), Veterinary University, Budapest, Institute of Nutrition (Director: R, Tarjan), Budapest and State Institute of Veterinary Hygiene (Director: T. Kadar), Budapest.
                    (LEPTOSPIROSIS)

KEMENES, F.; BOKORI, J.; KARSAI, F.; SURJAN, J.

Leptospira canicola-induced abortion in swine in Hungary.
Acta veter Hung 12 no. 3:235-248 '62.

1. Institute of Epizootiology (Director: Prof. R. Manninger)
   and Clinic of Internal Diseases (Director:Prof. J. Moory)
   of the Veterinary College and "Phylaxia" State Serum
   Institute (Director: J. Molnar), Budapest.

KEMENES, Ferenc, dr.

The occurrence of double and triple infections caused by
leptospirae in Hungary. Nepegeszsegugy 44 no.11:345-346
N '63.

1. Kozlemeny as Allatorvostudomanyi Egyetem jarvanytani intezete-
bol (igazgato: Manninger Rezso dr., egyetemi tanar, akademikus).
       (LEPTOSPIROSIS)   (SWINE DISEASES)
       (OCCUPATIONAL DISEASES)   (ZOONOSES)