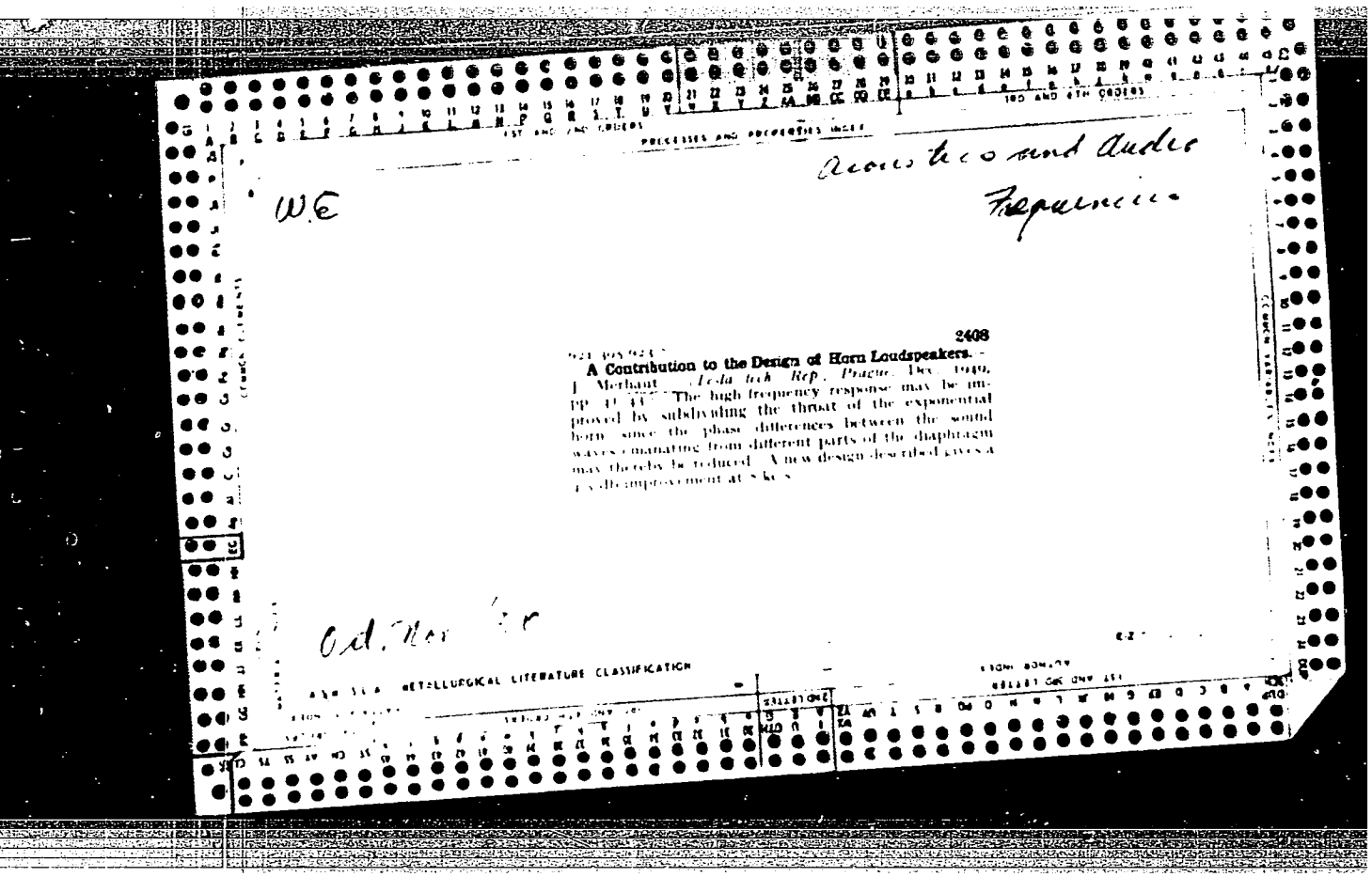
"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Acoustics and Audio Frequencies

W.E

2408

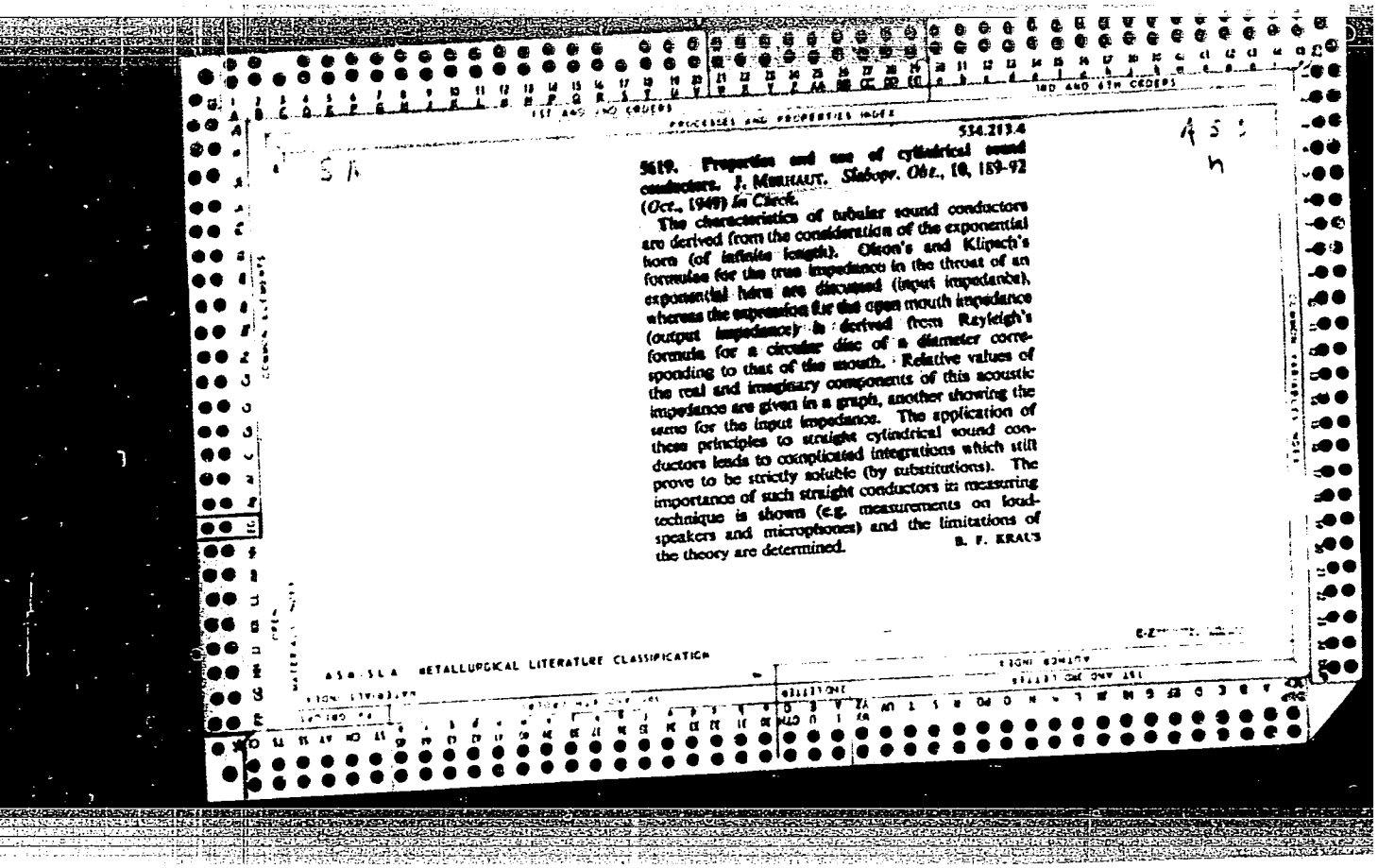
A Contribution to the Design of Horn Loudspeakers. — J. Merhaut. (*Tesla tech. Rep., Prague*, Dec. 1949, pp. 41-44.) The high frequency response may be improved by subdividing the throat of the exponential horn since the phase differences between the sound waves emanating from different parts of the diaphragm may thereby be reduced. A new design described gives a 4 v/db improvement at 8 kc/s.

Oct. Nov '50

A.S.M. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103



534.213.4

5619. **Properties and use of cylindrical sound conductors.** J. MERHAUT. *Slaboproud. Obz.*, 10, 189-92 (*Oct.*, 1949) *In Czech.*

The characteristics of tubular sound conductors are derived from the consideration of the exponential horn (of infinite length). Olson's and Klipsch's formulae for the true impedance in the throat of an exponential horn are discussed (input impedance), whereas the expression for the open mouth impedance (output impedance) is derived from Rayleigh's formula for a circular disc of a diameter corresponding to that of the mouth. Relative values of the real and imaginary components of this acoustic impedance are given in a graph, another showing the same for the input impedance. The application of these principles to straight cylindrical sound conductors leads to complicated integrations which still prove to be strictly soluble (by substitutions). The importance of such straight conductors in measuring technique is shown (e.g. measurements on loudspeakers and microphones) and the limitations of the theory are determined.

B. F. KRAUS

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

1289. New electroacoustic transducers for telecommunication. J. MERHAUT. *Slaboproudý Obzor*, 15, No. 6, 242–58 [in Czech].

Theory and design of a new carbon microphone and an electromagnetic receiver are explained in detail. The frequency characteristic of the microphone is practically flat between 300 c/s and 3·5 kc/s except for two slight resonance peaks of about +3 db and +5 db, appearing at 1·1 kc/s and 3·0 kc/s, respectively. Response of the receiver is flat between 300 c/s and 1·8 kc/s, and oscillatory between 1·8 kc/s and 3·6 kc/s, the peak-to-peak oscillation not exceeding 5 db. It is claimed that the receiver is superior to that of the Bell System (1952), since its frequency characteristic is slightly better and it employs considerably less Ni and no Co.

R. S. SIDOROWICZ

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, J.

Discussion of the attenuation of intelligibility (AEN) at the General Assembly of the International Telephone Consultative Committee, p. 339, SLABOPROUDY OBZOR, (Ministerstvo stro,irenstvi a ministerstvo spoju) Praha, Vol. 16, No. 7, July 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

Merhaut, J.

Merhaut, J. 2d World Congress on Acoustics. (Supplement) p. 23.

Vol. 18, no. 1, Jan. 1957
SLABOPROUDY OBZOR
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, J.

621.395.623.73

3204. NEW TRENDS IN THE MANUFACTURE OF ACOUSTIC DIAPHRAGMS. O.Gillig and J.Merhaut.
Slaboproudý Obzor, Vol. 18, No. 4, 197-4 (1957). In Czech.

Diaphragm materials are discussed in some detail and experimental results are given. The diaphragms were made of wood-pulp cellulose which was processed and pressed into a desired shape. Diaphragms with high bending strengths could be obtained by very fine grinding and wet-pressing of the cellulose, but they showed a number of undesirable partial resonances. The addition of carbon black and long synthetic fibres into the cellulose helped to reduce the partial resonances; a further improvement was secured by damping the edges of the diaphragm with a coat of thick varnish. The diaphragms so obtained had a natural resonance below 35 c/s and a uniform response (±2.5 dB) up to 5 kc/s.

R.S.Sidorowicz

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

Merhaut, J.

Merhaut, J. Use of acoustic lenses in loudspeakers. p. 110.

Vol. 18, no. 2, Feb. 1957
SLABOPROUDY OBZOR
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, J.

2

6178. PISTONPHONE WITH A DIFFERENTIAL PISTON.
J Merlaut and M.Vlček.
Slaboproudý Obzor, Vol. 18, No. 3, 140-3 (1957). In Czech.
The pistonphone is a device for producing a known acoustic pressure and it is used in the calibration of standard condenser microphones. Magnitude of the pressure is determined by the geometry of the system and the accuracy of this computation is dependent (among other factors) on the accuracy of measurement of the displacement and the effective area of the piston of the device. The Czechoslovak instrument gives an accuracy of 1%, and employs a differential piston having a diameter of 10 mm at one end and a diameter of 9.54 mm at the other end. The effective area of the piston is 7.17 mm^2 and it slides axially through a cylindrical chamber (cavity) having a volume of 166.14 cm^3. At its thinner end the piston is provided with an elastic spring fitted with a sapphire point. The spring is vibrated transversely at the same frequency as (but out of phase with) the piston. When observed through a microscope, the point traces an ellipse. This permits the elimination of error due to the thickness of the point and helps to control the linearity of the piston motion. Experimental results obtained with the pistonphone are in agreement with the C.C.I.F. standards to within 0.1 dB. R.S Shorowicz

NT

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MEINAUT.

Ales Boleslav's Reproduktory a ozvucnice (Loudspeakers and Resonators); a book review. (Supplement)

P. L53. (SLABOPROUDY A Z.R.) (Praha, Czechoslovakia) Vol. IX, No. 8, Aug. 1957

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, 1958

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, J.

Z/039/60/021/01/002/040
E140/E135

AUTHOR: Doctor Josef Merhaut (Engineer)

TITLE: Intermodulation Distortion in Loudspeakers

PERIODICAL: Slaboproudý Obzor, 1960, Vol 21, Nr 1, pp 3-10

ABSTRACT: Measurement of loudspeaker frequency characteristics is quite common but measurement of its distortion is as yet seldom carried out. However, this is an important parameter and the present article discusses types of distortion and its measurement. There are two independent sources of distortion in loud speakers. One is due to the non-linearity and may be reduced by better design. The other, however, is independent of design and is due to the Doppler effect which gives rise to frequency modulation of high tones at the frequency of a simultaneous low tone. In the analysis of non-linearity distortion the author assumes a frequency independent polynomial. In the analysis of Doppler intermodulation the non-linearity components are neglected as being small against the signal. A diagram (Fig 2) is obtained showing the per cent distortion at various frequencies for the first and second frequency modulation sidebands.

Card 1/2

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

Z/039/60/021/01/002/040
E140/E135

Intermodulation Distortion in Loudspeakers

This graph is of use in calculating the crossover frequency for loud speaker systems. These values are, however, approximate since in the derivation a piston membrane was assumed instead of a conical membrane, the membrane motion was assumed cophased and the velocity effective only at the axis. The theoretical conclusions were tested experimentally and fair agreement was obtained between the calculated and experimentally measured results. In measuring intermodulation distortion the measurements must be so carried out as to enable separation of the non-linearity and Doppler components. To judge the quality of the product only the non-linearity component should be used. The author notes that from this point of view the British method (Ref 6) is incorrect. There are 8 figures, 2 tables and 6 references, of which 3 are English, 2 German and 1 Czech.

Card 2/2

SUBMITTED: September 15, 1959

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, Josef, inz., dr.

The application of matrices in the theory of electroacoustical transducers. Slaboproudy obzor 22 no.6:347-349 Je '61.
(EEAI 10:9)

1. TESLA Valasske Mezirici, n.p. vyzkumny a vyvojove pracoviste Praha-Jeneralka.

(Electroacoustics) (Electric circuits)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

BOLESLAV, A.; KOLMER, F.; MERHAUT, J.; NEMEC, J.; SLAVIK, J.B., prof.

Report on th 4th International Congress on Acoustics in Copenhagen, August 21-28, 1962. Slaboproudy obzor 24 no.3:183-185 Mr '63.

1. Katedra fyziky, Elektrotechnicka fakulta, Ceske vysoke uceni technicke Praha (for Slavik). 2. Vyzkumny ustav zvukove, obrazove a reprodukcni techniky, Praha (for Kolmer). 3. Statni vyzkumny ustav tepelne techniky, Praha (for Nemec).

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 10470-66

ACC NR: AP6003695 SOURCE CODE: CZ/0039/65/026/001/0001/0005

AUTHOR: Merhaut, Josef--Mergaut, Y. (Professor, Doctor, Doctor of sciences); Malac, Vlastislav--Malach, V. (Engineer) 39 B

ORG: Electroacoustic Research and Development Institute, Prague (Vyzkumny a vyvojovi ustav elektroakustiky); Tesla n. p., Pardubice

TITLE: Cross-talk limits in stereophonic reproduction

SOURCE: Slaboproudy obzor, v. 26, no. 1, 1965, 1-5

TOPIC TAGS: acoustics, electronics

ABSTRACT: Experimental investigations are described on the limits of permissible cross talk between channels in two-channel stereophony. The test subjects were trained listeners with normal hearing; stereophonic music was played with a two-octave range. The XY as well as the AB signals were measured. The results showed that cross-talk limits depend on frequency, and that narrow-range cross talk is tolerated substantially better than had been anticipated. Orig. art. has: 11 figures and 1 table. [JPRS]

SUB CODE: 20, 09 / SUBM DATE: 12May64 / OTH REF: 002

HW

Card 1/1 UDC: 621.396.813

1/1

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

SOV/115-59-5-3/27

24(4)

AUTHOR: Mergol'd, M.M.

TITLE: Devices for the Optical divider

PERIODICAL: Izmeritel' .ya Tekhnika, 1959, Nr 5, pp 4-5 (USSR)

ABSTRACT: The optical divider is used with several additional devices to measure the angles between dividing lines on parts of cylindrical or polygonal surfaces. It can be applied on a large scale, if it is used with the tube, object-glass, and object holder of a small workshop microscope. Fig.1 shows the grouping of instruments to measure the angles between dividing lines on parts of cylindrical surfaces. Fig.2 shows grouping to measure angles of parts with polygonal surface. A flat mirror is used. (1) If the microscope has an illuminating device, it can be used to measure cutting tools, as well as pressed pieces, gears etc. A similar optical device is used by F.G. Kotel'nikov to test graduated arcs. Kotel'nikov added a centered surface plate with four screws. There are 2 photographs.

Card 1/1

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

SOV/115-59-7-5/33

25(1), 28(2)

AUTHOR: Mergol'd, M.M.

TITLE: The Manufacture of Laps for Finishing Measuring Instruments

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 7, p 10 (USSR)

ABSTRACT: When finishing the measuring surfaces of worn micrometers and other precision measuring instruments, special cylindrical cast iron laps of 30 mm diameter are used whose butt surfaces must not exceed a planeparallelity deviation of 1-2 microns. Finishing one surface is rather simple, but greater difficulties are encountered when processing the second surface. The finishing of the second butt surface of a lap may be considerably simplified using the device suggested by the author and shown in a photograph. This device consists of two concentric cylinders which fix the lap in a plane-parallel position. The lap with the cylinders is then transferred to the finishing machine for further working. The method described by the author speeds up finishing of laps by 6-8 times compared to manual methods. It provides a higher working accuracy and does not require a high qualification of the laborer performing this operation. There is 1 photograph.

Card 1/1

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

BLAZHEK, Miroslav (Blažek Miroslav); AVDEICHEV, L.A. [translator]; ROZOVAYA, S.I. [translator]; RUBINSHTEYN, G.I. [translator]; MERGOYZ, I.M., red.; PIVOVAROV, Yu.L., red.; FEL'DMAN, O.I., red.; IOVLEVA, N.A., tekhn. red.

[Economic geography of Czechoslovakia. Translated from the Czechoslovakian] Ekonomicheskaia geografiia Chekhoslovakii. Vstup. stat'ia i red. I.M.Maergoiza. Moskva, Izd-vo inostr. lit-ry, 1960. 476 p. (MIRA 14:5)
(Czechoslovakia--Economic geography)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAN, M.

Planning narrow-gauge railroad systems. p. 358.

(KOZLEKEDESTUDOMANYI SZEMLE, Budapest, Vol. 4, No. 10, Oct. 1954.)

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

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

HUNT, K.; MARHOLD, J.; MERHAUT, J.

Occupational tumors of the urinary system in Czechoslovakia.
Neoplasma 8 no.5:551-560 '61.

1. Urologische Abt. d. Bezirkskrankenhauses, Pardubice, Forschungsinstitut fur organische Synthesen, Pardubice--Rybitvi, Betriebssanitatsdistrikt der Ostbohmischen chemischen Werke Semtin--Rybitvi.
(UROGENITAL SYSTEM neopl) (OCCUPATIONAL DISEASES)
(CARCINOGENS)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, Z

Production programs of East German Automobile plants .

p. 171 (Automobil) Vol. 1, no. 5, May 1951 Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 2, NO. 1, Jan. 195

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT. Z.

Improvements of design in Mercedes-Benz cars.

P. 334 (Automobil. Vol. 1, no. 10, October 1957 Praha, Czechoslovakia)

Monthly Index of East Europe Accessions (EEAI) LC. Vol. 7, no. 2, February 1957

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUT, Z.

A new BMW 600 automobile.

p. 370 (AUTOMOBIL) Vol. 1, no. 11, Nov. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

FISCHER, A.; MERHAUTOVA, J.; JOACHIMSTHALER, F.; SUKOP, J.

Studies on muscular coordination and on its changes following exercise and fatigue in work and athletic performance. Cesk. fysiol. 8 no.3:187 Apr 59.

1. Vyzkumny ustav telovychovny, Praha. Prednesene na III. fyziologickych dnoch v Brne dna 14. 1. 1959.

(PHYSICAL EFFICIENCY,
eff. of fatigue & work & athletic performance on musc. coordination (Cz))
(EXERCISE, eff.
on musc. coordination (Cz))

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

KRAL, Jiri; SVEJCAR, J.; JANDA, F.; MACEK, M.; MERHAUTOVA, J.; TOMANEK, J.; SKVARA, F.

Problem of physical education of the youth. Cesk.pediat. 15 no.1: 60-67 Ja '60.
(PHYSICAL EDUCATION AND TRAINING)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUTOVA, J.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERHAUTOVA, J.; SUKOP, J.; JOACHIMSTHALER, F.; tech. spol. BARTOSOVA, S.; JURINOVA, I.; MOLDRIKOVA, V.; STASTNA, J.; ZBUŽKOVA, E.; NEMCOVA, E.

The effect of athletic education on the physical development, functional condition and sporting performance in the youth aged 10-12 years.
Cesk. hyg. 7 no.2/3:145-152 '62.

1. Vyzkumny ustav telovychovny, Praha.
(GROWTH in inf & child) (PHYSICAL FITNESS in inf & child)
(SPORT MEDICINE) (PHYSICAL EDUCATION AND TRAINING in inf & child)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

TRESNAK, Zdenek, inz; MERHOUT, Bohuslav

Plastic materials used for motor rolling stock. Zel dop tech 10 no.2:49-51 '62

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

SOV/109-4-1-20/30

AUTHORS: Kazantsev, Yu.N. and Meriakri, V.V.

TITLE: Measurement of the Attenuation in Ring Waveguides (Izmereniye zatukhaniy v kol'tsevykh volnovodakh)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1, pp 131 - 133 (USSR)

ABSTRACT: A ring waveguide consists of a series of identical metallic rings having a common axis and spaced at small intervals from each other. Such a structure produces an additional attenuation of the H_{on} waves in comparison with the losses in a normal circular waveguide of the same diameter. The attenuation of ring waveguides having an internal diameter of 18 mm was measured experimentally at a wavelength of 8 mm. The equipment used in the measurement is illustrated diagrammatically in the figure on p 132; this consisted of a klystron oscillator which was modulated by means of rectangular pulses, a decoupling attenuator, a calibrated attenuator, an exciter of the H_{01} wave, a helical filter, a couplin iris, the investigated waveguide (which was connected as a resonator), a shorting plunger, a detector and an

Card1/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

Measurement of the Attenuation in Ring Waveguides

oscillograph. The investigated samples consisted of a set of equidistantly spaced copper rings having a rectangular cross-section; the rings were situated in a stiff dielectric shell, having a permittivity of 3.2 and a loss tangent of 0.02. The measured results are shown in Tables 1 and 2. Table 1 shows the increase in the attenuation for five different samples for various values of ring spacing and width. Table 2 shows the increase in the attenuation for various values of the elliptical deformation of the rings. From the result, it is seen that the elliptical deformation results in a considerable attenuation, whereas in a perfectly symmetrical waveguide, attenuation of the H_{01} wave is only slightly more than that in a normal circular waveguide. There are 1 figure, 2 tables and 3 references, 2 of which are Soviet and 1 English.

Card 2/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

SOV/109-4-1-20/30

Measurement of the Attenuation in Ring Waveguides

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics of the Ac.Sc.USSR)

SUBMITTED: May 4, 1958

Card 3/3

FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

SOV/109-4-1-21/30

AUTHORS: Kazantsev, Yu.N. and Meriakri, V.V.

TITLE: Transmission of the H_{01} Wave Through a Bend Having a Small Radius of Curvature (Peredacha volny H_{01} cherez izgib s malym radiusom krivizny)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1, pp 133 - 134 (USSR)

ABSTRACT: The authors constructed and investigated bends in the ring waveguides of the type described in the preceding article in this issue of the journal (Ref 3). The measurement of the attenuation in the bends was effected at a wavelength of 8 mm, by employing the same method as in the preceding work. A 90° bend in a waveguide having a diameter of 18 mm and a structure period of 1 mm, was investigated; the cross-section of the rings was 0.5 x 0.5 mm, while the radius of curvature of the bend was 55 cm. The attenuation curve for the bend as a functi of frequency, is given by the upper graph in Figure 1, from which it is seen that its value is about 0.8 db. Mos of this attenuation is due to the bend, since only 0.15 db is due to the wall losses and the elliptical-deformation

Cardl/3

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

S/109/61/006/008/004/018
D207/D304

9.1300

AUTHORS: [illegible], S.B., and Meriakri, V.V.

TITLE: Su[illegible] resonance effects in multimode waveguides

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 8, 1961, 1284 - 1[illegible]

TEXT: Waveguides with larger than necessary cross sections find an increasing number of applications in antenna techniques. In such waveguides besides the wanted, the unwanted (parasitic) modes can propagate. Of most interest are circular type waveguides for the H_{01} mode, in which attenuation of the order of a few decibels per km can be achieved. The unwanted modes resulting from the line inhomogeneities have usually very small amplitudes. In the present article, the authors analyse the harmful effects due to the resonance of unwanted (parasitic) waves in multimode waveguides. This analysis permits the evaluation of the increase in losses and VSWR

Card 1/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

S/109/61/006/008/004/018
D207/D304

Suppression of resonance ...

of the basic mode and resulting surges in feeders having several modes of propagation. From the obtained relationships the best model of avoiding resonance effects can be determined. The losses in the basic mode and the [illegible] $(1 + |R|)/(1 - |R|)$ can be decreased by making $\alpha_2 L \geq 2\Gamma^2$ (1 - [illegible]. The maximum value of the surge voltage at max. of the resonance and small losses follows from

$$\beta_2 L - \varphi_{22} = \pi p, \quad p = 1, 2, 3, \ldots \tag{3}$$

and

$$(\beta_2 L - \varphi_{22}) - (\beta_1 L - \varphi_{11}) = (2q - 1)\pi, \quad q = 1, 2, 3, \ldots \tag{4}$$

and is equal to $1/[1 - (\alpha_2 L/2\Gamma)]$ and to avoid surges the condition $\alpha_2 L \geq 2\Gamma(1 - \Gamma)$ must be satisfied. The authors suggest further methods of experimental determination of resonance effects by measuring the transformation coefficients Γ^2 of the transitions and the

Card 2/5

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

S/109/61/006/008/004/018
E207/E304

Suppression of resonance ...

transmitting waves of the order of 8 mm. In the experimental model of the filter this coefficient was about -19 db. The number of slots was taken as 16. Losses were determined experimentally, giving H^0_{02} losses, due to filter at $\lambda = 6 \div 8.3$ mm of about 10 db, with corresponding losses of H^0_{01} mode less than 0.2 db. When the attenuation of the basic mode has to be made less, waveguides with larger diameters have to be used. Then, the coupling of the filter as given by

$$c_N = \sqrt{\frac{\pi}{2}\frac{\mu_{0n} N M l^2}{\rho_{0n}\sqrt{d^3 \sigma_r^2}}}\, e^{i\frac{\beta_{0n}\tau}{2}}. \qquad (15)$$

[Abstractor's note: Erroneously given in text as Eq.(18) which does not exist] decreases. It follows that in order to suppress the resonance effects in waveguides with large kr, the filters should be placed in the vicinity of the critical cross section for the wave to be suppressed, i.e. near the minimum values of kr. If transition

Card 4/5

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

24884

S [illegible] 008/004/018
D[illegible] D[illegible]

Suppression of resonance ...

with a smaller diameter is impracticable, [illegible] with a [illegible] [illegible]th channels should be used. The [illegible] their work by [illegible] There [illegible] [illegible] Soviet [illegible] [illegible]-language [illegible] Instn. Electr. Engr. [illegible] [illegible] Bell System Techn. [illegible] [illegible] 39, 11, 1417.

[illegible] Institut radiotek[illegible] [illegible] of Radio Engr[illegible]

SUBMITTED: August [illegible]

Card 5/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

38465

S/109/62/007/006/016/024
D266/D308

9.1300

AUTHOR: Meriakri, V. V.

TITLE: A stray wave filter in circular waveguide

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 6, 1962, 1042-1044

TEXT: The paper describes a mode filter suitable for overmoded circular waveguide propagating the H_{01} mode. The filter introduces attenuation for all modes with the exception of the H_{01}, H_{11}, and E_{01} modes, i.e. it is effective for all the higher order circular electric modes. It works on the principle that the partial dielectric filling in the circular waveguide concentrates the power of the desired H_{01} mode in the middle whilst the higher order modes are attenuated by a lossy material replacing the wall of the waveguide for a certain length. The dielectric filling is tapered on both ends in order to ensure matching of the H_{01} mode. The dielec-

4

Card 1/ 3

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

S/109/62/007/006/016/024
D266/D308

A stray wave ...

tric constant ε and the radius of the dielectric b_0 are chosen on the condition that the major part of the power of the H_{01} mode should be concentrated in the dielectric but the mode conversion into the H_{02} mode should be kept low. These calculations were performed by Wang Huan-cho (Radiotekhnika i elektronika, 1960, 5, 7, 1072) leading to the condition

$$5.52 \quad kb_0\sqrt{\varepsilon - 1} \geq 2.40 \qquad (1)$$

The author also gives formulas for the conversion into the H_{02} mode, for the reflection of the H_{01} mode and for the loss in the dielectric. A mode filter on these principles was made having about 10 db attenuation for the modes H_{12} and only a few tenths of a decibel for the H_{01} mode. The author believes that by improv-

Card 2/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

A stray wave ...

ing the match, reducing the loss in the dielectric and optimizing the choice of b_0 and , the performance of the mode filter can be substantially improved. There are 2 figures.

SUBMITTED: November 25, 1961

Card 3/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

S/109/62/007/012/002/021
D266/D308

AUTHORS: Meriakri, V. V. and Vaganov, R. B.

TITLE: Methods for the experimental determination of mode conversion in short waveguide sections

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 12, 1962, 1997-2002

TEXT: The basic arrangement consists of a real pipe limited by junctions. The fundamental mode can propagate through the device but the spurious modes are assumed to be 'trapped', i.e. there is a cut-off cross-section for each spurious mode somewhere along the taper. Introducing matrix notations and denoting the input wave by E_{in}

$$E_{in} = \left[I - (SI''S^{*}I')\right] S^{-1}E_{out} \qquad (1)$$

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

where I - unit matrix, I", I', S - scattering matrices of the left-hand junction, right-hand junction and waveguide respectively. Restricting the analysis to two modes (fundamental and one spurious) using the formulas derived by J. Young and D. Marcuse (Proc. symposium on millimeter waves, N. Y., 1959, 513) for the self-coupling and cross-coupling coefficient, introducing the parameter

$$Q = \left| \int_0^L k_{12}\, e^{\int_0^z \gamma_{12}\, dt}\, dz \right|^2$$

(where k_{12} - distributed coupling coefficient between the fundamental and the spurious mode, $\gamma_{12} = \gamma_1 - \gamma_2$, $\gamma_1 = \alpha_1 + i\beta_1$ - propagation coefficient of the fundamental mode, L - length of the waveguide to be measured) and assuming that the mode conversion due to the tapers is much smaller than Q the following relationship is derived:

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

$$Q = \eta\left(\frac{1}{|D|_p} - 1\right) \qquad (9)$$

η - attenuation of the spurious mode, $|D|_p$ - transmission coefficient of the fundamental mode at the resonance of the spurious mode. If η is known and $|D|_p$ is measured, Q can be determined from Eq. (9). The method is extended to one particular case of 3-wave interaction. In the experimental part of the paper the mode conversion between the H_{01} and H_{02}, H_{12} modes is investigated. Experimental results are presented for both copper and steel waveguides in the 7.9 - 8.4 mm band. Maximum length of the waveguide section was 7.5 m because with larger lengths further resonances appeared. The diameter of the waveguides was 60 mm and a dielectric coating of 90 microns was applied. There are 2 figures and 1 table.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

S/109/62/007/012/002/021

Methods for the ...

ASSOCIATION: Institut radiotekhniki i elektroniki, AN SSSR (Institute of Radio Engineering and Electronics, AS USSR)

SUBMITTED: January 12, 1962

Card 4/4

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIAKRI, V.V.

Determination of the characteristics of long waveguide lines using results of the study of short lines. Radiotekh. i elektron. 8 no.11:1949-1952 N '63. (MIRA 17:1)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 60874-65 EWT(1)/EEC-4/EWA(h)

ACCESSION NR: AP5017658 UR/0109/65/010/007/1226/1232
621.372.823.09

25
B

AUTHOR: Kotik, I. P.; Meriakri, V. V.; Persikov, M. V.; Sivov, A. N.

TITLE: Theoretical analysis and some applications of circular waveguides with longitudinal slots

25

SOURCE: Radiotekhnika i elektronika, v. 10, no. 7, 1965, 1226-1232

TOPIC TAGS: waveguide, circular waveguide, wave filter, energy coupler, directional coupler, attenuator

ABSTRACT: Symmetrical wave propagation in circular waveguides with the periodic structure in the φ-axis shown in Fig. 1 of Enclosure is analyzed. For waves with $\lambda > p$, the longitudinal slots act as a heavy shield for TM_{nm} waves and a weak shield for the TE_{nm} waves, permitting separate coexistence of symmetrical magnetic and electrical waves. A model, of finite length and end-coupled with solid metallic circular waveguides, is discussed. It has the following characteristics: $a = 10$ mm, $p = 2$ mm, $q = 2b'/p = 0.72$, and $b = 20.75$ mm. An incident TE_{01} wave with the characteristic value of $\mu_{01} = 3.83$ is applied from the solid waveguide. Energy transfer from the $r \leq a$ region into the $a \leq r \leq b$ region is periodic with a beat

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 60874-65
ACCESSION NR: AP5017658 O

wavelength λ_b = 26 cm. Practically complete energy transfer (99% or -20 db) should take place at Z = $\lambda_b/2$ = 13 cm; however, actual tests showed energy transfer of -18 db at Z = 11 cm. When loaded, the waveguide behaves like a TE_{01} variable linear attenuator with an approximate slope of 1 db/cm. The waveguide when used as a filter is characterized by 0.1—0.2-db TM_{01} and TM_{11} attenuation while the TE_{01} wave was down 20 db. Orig. art. has: 7 figures and 21 formulas. [BD]

ASSOCIATION: none

SUBMITTED: 13May64 ENCL: 01 SUB CODE: EC

NO REF SOV: 006 OTHER: 002 ATD PRESS: 4063

Card 2/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 60874-65

ACCESSION NR: AP5017658

ENCLOSURE: 01

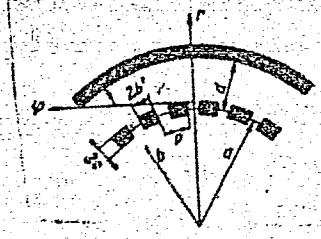

Fig. 1. Cross-section of the waveguide

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 22351-66 EWT(1)/EWA(h)

ACC NR: AP6013527 SOURCE CODE: UR/0120/66/000/002/0204/0205

18
B

AUTHOR: Meriakri, V. V.

ORG: Institute of Radio Engineering and Electronics AN SSSR, Moscow (Institut radiotekhniki i elektroniki AN SSSR)

TITLE: Tunable multiwave coupler

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 204-205

TOPIC TAGS: waveguide coupler

ABSTRACT: A new type of selective coupler whose tuning element (4), allows it to be tuned to any wave propagated in a round or rectangular waveguide has been designed (see Fig. 1). The movable plate displacement δ determines the phase constant

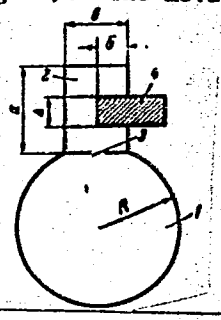

Fig. 1. Coupler layout.

1 - Primary round or rectangular waveguide; 2 - secondary rectangular waveguide; 3 - coupling hole; 4 - tuning element.

Card 1/2 UDC: 621.372.8

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 22351-66
ACC NR: AP6013527

$\beta_{10}(\delta)$ for an H_{10} wave and thereby converts the rectangular waveguide to π-shape. By choosing values for a and Δ, $\beta_{10}(\delta_i)$ may take on values which correspond to all types of waves propagated in the waveguide. In each position δ_i, the corresponding wave will be selectively transferred from waveguide 1 into 2 without affecting other waves. Two models for 8 mm waves were tested. In the first, the round waveguide had a radius of 14 mm, a = 7.2 mm, Δ = 2 mm, coupling hole radius = 1.4, and the number of coupling holes was 23. The attenuation of selected waves H_{01}, H_{21}, and H_{11} was 27, 26, and 33 db, respectively. In the second model, the round waveguide had a radius of 6 mm, a = 4.7 mm, Δ = 1.5 mm, coupling holes with dimensions 4 x 1.5 mm, and number of holes was 15. The attenuation of E_{11} and E_{01} waves was 12 and 14 db, respectively. The selectivity of the coupler with respect to neighboring waves was 10—13 db. Orig. art. has: 1 figure. [BD]

SUB CODE: 09/ SUBM DATE: 25Mar65/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 4242

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 41614-66 EWT(1)

ACC NR: AP6014248 SOURCE CODE: UR/0109/66/011/005/0934/0935

54
B

AUTHOR: Meriakri, V. V.

ORG: none

TITLE: TE-mode slot filters in a circular waveguide [Reported at the All-Union Conference of NTORiE, 10 May, 1964]

SOURCE: Radiotekhnika i elektronika, v. 11, no. 5, 1966, 934-935

TOPIC TAGS: circular waveguide, electric filter, slot antenna

ABSTRACT: The waveguide-slot filters passing TE_{MN} and stopping TE_{mn} where $m \neq M, 2M, 4M, \ldots$ are briefly considered. 2M longitudinal slots are cut in the waveguide at the points of minimum TE_{MN}-mode longitudinal currents. By using a slot-antenna theory, this formula for TE_{mn}-mode loss is developed: $\alpha_{mn} = 20 \lg (1 + P_{mn})$ where P_{mn} is the normalized TE_{mn}-mode amplitude. Experimental multislot filters showed a loss under 0.5 db at one of TE_{11}, TE_{12}, TE_{21}, E_{11}, E_{01} modes while the attenuation for the TE_{01}-mode was 6—40 db. Orig. art. has: 1 figure and 4 formulas.

SUB CODE: 09 / SUBM DATE: 24Aug65 / ORIG REF: 003

Card 1/1

UDC: 621.372.852

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

[illegible]ICKA, J.

Thermal coefficient of resistance. p. 143.
(ELECTROTECHNICKY OBZOR, vol. [illegible], no. 3, Mar. [illegible], Praha

SO: Monthly List of East European Accession,(EEAL) LC, Vol. [illegible], No. 11,
Nov. 1965, Uncl.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, J.

Elektrotechnicky Obzor
Vol. 47, Nr, 3, 1958

p. 134-143

2

Mericka, J. Measurement of the Noise of Electric Machines

Measurement of the Noise of Electric Machines. The paper deals with the methods of measuring the noise of electric machines. Beside the usual measurements of the sound pressure level by means of a sound level meter, various further methods are used, such as various ways of analyzing the noise or measuring the sound power level. For the sound power level, which is an objective value independent of the distance from the machine and of its surroundings, relations are derived, presenting a base for measurements by means of a sound level meter. In conclusion, the author refers to methods of measuring the loudness level. The article is supplemented by an example of the construction of an anechoic chamber and an example of a direct method for measuring the sound power level.

1/1

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, Jiri, inz., kandidat technickych ved.

"Automatic frequence and performance control in power systems" by A.G.Moskalev. Reviewed by Jiri Mericka. El tech obzor 51 no.7:374 Jl '62.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, Jiri, inz., kandidat technickych ved

"Symmetrical components in alternating current machines" by P. Kovacs. Reviewed by Jiri Mericka. El tech obzor 51 no.11:615 no.11:615 N '62.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, Jiri, inz., kandidat technickych ved.

Running stability of a synchronous motor in sudden changes of line voltage. El tech obzor 52 no.4:203-204 Ap '63.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, Jiri, inz., kandidat technickych ved

Outline of transient phenomena of electric machines. El tech obzor 52 no.5:269-270 My '63.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERICKA, Jiri, inz. CSc.

Analysis of the dependence of frequency changes on the changes in network load. El Tech obzor 53 no. 3: 15? Mr '64.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACCESSION NR: AP4042272 Z/0032/64/014/007/0509/0517

AUTHOR: Vyklicky, M.(Engineer); Mericka, M., Kabrhel, A. (Engineer); Tuma, H., (Engineer); Kopal, V.(Engineer); Mursec,M.(Engineer);Dvorak,K.(Engineer); Valtr,V.

TITLE: Corrosion resistance of steel with a two-phase structure of the type Cr21Ni5

SOURCE: Strojirenstvi, v. 14, no. 7, 1964, 509-517

TOPIC TAGS: chromium steel, nickel steel, stainless steel, corrosion resistance, phase structure, alloy steel, alloying, phosphorus, titanium

ABSTRACT: Extensive experiments have been carried out to test corrosion resistance of newly introduced non-rusting steels with a two-phase structure of the type Cr21Ni5, which are mainly utilized in equipment of the chemical industry. The tests were carried out in the laboratory and confirmed by experiments in industrial plants, and included comparisons with classical steels which the new types

Card 1/5

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACCESSION NR: AP4042272

were to replace. Laboratory tests of the usual type were carried out on 30 x 80 x 2 mm (and also 1 mm) samples and plant tests on 20 x x 100 x 2 mm samples. The results of the experiments are in agreement with corrosion theory. Increased phosphorus content lowers the corrosion resistance. The varying effect of titanium added to Cr21Ni5 and Cr18Ni9 in different acids is discussed. In general it is found that the optimal types of two-phase steels have a corrosion resistance similar to that of classical austenite steel while being more economical than the corrosion resistant CSN 17460 and 17471 steels, and exhibiting a much higher intercrystalline-corrosion resistance. It was found that in the food-processing industry Cr21Ni5Ti can almost fully replace CSN 17246 steel. Orig. art. has: 6 figures and 13 tables.

ASSOCIATION: SVUMT, Prague

SUBMITTED: 00 ENCL: 03

SUB CODE: MM NR REF SOV: 001 OTHER: 006

Card 2/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACCESSION NR: AP4042272

ENCLOSURE: 01

Ocel 1	ČSN 17 254 Cr21Ni5Ti			ČSN 42 2953 Cr21Ni5	ČSN 42 2038 Cr21Ni5Ti	ČSN 42 2043 Cr21Ni6Mo2
výrobek 2	Plechy 3	Tyče 4	Výkovky 5	Odlitky 6	Odlitky	Odlitky
σ_{kt} [kp/mm²] min.	40	38	38	35	35	35
σ_{pt} [kp/mm²]	65—90	65—90	65—90	68—90	65—90	65—90
δ_4 [%] min.	23	20	20	18	12	18
ψ [%] min.	35	35	35	15	10	15
R [mkp/cm²] min.	8	8	8	4	2	4
Tvrdost HB 7	—	—	—	180—250	180—250	180—250

Card 3/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACCESSION NR: AP4042272

ENCLOSURE: 02

Svařitelnost 8	zaručená 14	zaručená	zaručená	zaručená
Doporučované elektrody 9	E 389	E 388 E 389	E 389	E 390 E 391
Tepelné zpracování[1] 10	980—1020 °C	1000—1050 °C	980—1020 °C	980—1020 °C
Teplota použití (maximální) 11	250 °C	300 °C	300 °C	300 °C
Nahrazovaná ocel ČSN 12	17240	422031 422032	422933	422942
Obrobitelnost 13	dobrá 15	dobrá	dobrá	dobrá

Card 4/5

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACCESSION NR: AP4042272

ENCLOSURE: 03

Legend for Enc. 01: 1 - steel, 2 - article, 3 - plate, 4 - rod, 5 - forging, 6 - casging, 7 - hardness, 8 - weldability, 9 - electrodes used, 10 - heat treatment, 11 - maximum operating temperature, 12 - replaces CSN steel, 13 - workability, 14 - guaranteed, 15 - good

*With suggested quenching in water or air. Steels with two-phase structure are more workable than conventionalppure austenitic steels.

Card 5/5

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACC NR: AP7003774 SOURCE CODE: CZ/0032/66/016/012/0909/0914

AUTHOR: Vyklicky, M. (Engineer); Kabrhel, A. (Engineer); Mericka, M.

ORG: State Research Institute of Materials, Prague (Statni vyzkumny ustav materialu)

TITLE: Oxidation resistance of chromium and chromium-nickel [stainless] steels

SOURCE: Strojirenstvi, v. 16, no. 12, 1966, 909-914

TOPIC TAGS: ~~chromium~~ stainless steel, ~~chromium~~ nickel ~~stainless~~ steel, ~~stainless steel oxidation resistance~~ metal oxidation, chromium steel

ABSTRACT: A series of 24 wrought and cast stainless steels, 11 straight-chromium (7.01—27.25% chromium and 0—1.0% aluminum), and 13 chromium-nickel steels (17.5—27.51% chromium, 2.22—38.91% nickel, 0—0.82% titanium) were subjected to oxidation tests in air at temperatures up to 1300C for up to 1000 hr. It was confirmed that the chromium content is the main factor contributing to oxidation resistance. Silicon, aluminum, and nickel, the latter at contents above 20%, also have a beneficial effect. Carbon has a negative effect. Titanium and manganese and the structure of steels (cast or wrought) had no apparent effect on the oxidation resistance under the conditions used. A straight chromium steel with 18.58% chromium and a chromium-nickel steel with 18.58% chromium and 9.22% nickel, after 1000 hr at 950C, had the same weight loss of about 300 g/m^2. However, a chromium-

Card 1/2 UDC: none

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACC NR: AP7003774

nickel steel with 21.56% chromium and 38.91% nickel and a straight-chromium steel with 23.76% chromium suffered the same weight loss after 1000 hr at 1200C and 1075C, respectively. Orig. art. has: 12 figures and 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 003/

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ŘÍHA, J;MERICKOVA, J.

Working capacity following poliomyelitis. Acta chir. orthop. traum.cech. 19 no.1:27-33 1952. (CLML 22:2)

1. Of the Orthopedic Clinic (Head--Prof. J. Vavrda, M. D.) in Hradec Kralove.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIE, F.

Clinical manifestations in cyst of the cauda equina. Orv. hetil. 94 no.19: 526-529 10 May 1953. (CLML 25:1)

1. Doctor. 2. Psychiatric and Neurologic Clinic, Pecs. Medical University.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIHEIN, A.

AGRICULTURE

Periodical; SOTSIALISTICHESKIE ZEMLEDELIE Vol. 14, no. 1, Jan. 19[illegible]

MERIHEIN, A. A successive session of the Council for Mutual Economics. p. 37.

Monthly List of East European Accessions (EEAI) LC, Vol. [illegible], No. 5, May 19[illegible], Unclas.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIHEIN, A.

To prevent the damage caused by pine sawflies. p.528

SOTSIALISTLIK POLLUMAJANDUS. Tallinn, Estonia. Vol. 14, no. 11, June 1959

Monthly List of East European Accessions,(EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MAAVARA, Vambola, kand. biol. nauk, starshiy nauchnyy sotr.; MERIHEIN, Arnold; PARMAS, Helmut, inzh.-patolog lesnogo khoz.; PARMASTO, Erast, kand. biol. nauk; HABERMAN, H., akademik, retsenzent; KUMARI, E., prof., retsenzent; MUISTE, L., kand. biol. nauk, retsenzent; LING, H., kand. biol. nauk, retsenzent; ROIGAS, P., kand. sel'khoz. nauk, retsenzent; LAATS, A., prepodavatel', retsenzent; ORA, V., nauchnyy sotr., retsenzent; RANG, H., nauchnyy sotr., retsenzent; LALL, E., red.; VAHTRE, I., tekhn. red.

[Forest protection] Metsakaitse. Koostanud A.Merihein. Tallinn, Eesti riiklik kirjastus, 1961. 732 p. (MIRA 15:5)

1. Zoologicheskiy i botanicheskiy institut Akademii nauk Estonskoy SSR (for Maavara). 2. Direktor upravleniya lesnykh kul'tur i melioratsii Ministerstva sel'skogo khozyaystva Estonskoy SSR (for Merihein). 3. Ministerstvo sel'skogo khozyaystva Estonskoy SSR (for Parmas). 4. Nauchnyy sekretar' Zoologicheskogo i botanicheskogo instituta Akademii nauk Estonskoy SSR (for Parmasto). 5. Akademiya nauk Estonskoy SSR (for Haberman, Kumari, Muiste). 6. Akademiya sel'khozyaystvennykh nauk, Estonskaya SSR (for Laats). 7. Veterinarnyy nauchno-issledovatel'skiy institut, Estonskaya SSR (for Ore). 8. Institut khimii Akademii nauk Estonskoy SSR (for Rang).
(Estonia--Trees--Diseases and pests)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

Merin, I. M.

130-[illegible]-11/21

AUTHOR: Merin, I. M., Candidate of Technical Sciences.

TITLE: Preventing denting on work rolls. (Predotvrashchenie nadavov na rabochikh valkakh).

PERIODICAL: Metallurg, 1958, No. 5, pp. 4-[illegible] (USSR).

ABSTRACT: The author gives data on the [illegible] denting of work rolls in the cold reduction of strip at his Works (Unnamed) for various degrees of reduction per [illegible] to 1. The rolls were of type 9X steel (hardness [illegible] units Shore). The denting is caused mainly by the ends of the strip and unsuccessful [illegible] to minimize the effect by tapering the strip and providing resilience in the roll system. Good results were obtained by using a [illegible]-roll stand, one of the working rolls of which was provided with a collar 35-40 mm wide and 0.20-0.25 mm high, the back-up roll being correspondingly machined. Tests showed that with this system dents are not produced by strip ends for total reductions of 70 - 75% and individual reductions of 20 - 25% and sometimes 30%. With modifications reductions of 35 - 40% can be coped with. The system is now used [illegible] the works for carbon and alloy strip being cold rolled [illegible] thickness of 0.45 - [illegible] mm and

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Preventing denting on work rolls.

over from hot rolled strip 1.2 - 2.5 [illegible]
96 mm wide: for strip thinner than 0.45 [illegible] the author recommends collar-heights half the thickness of the finished strip. Adhesion of particles to the rolls is also said to be reduced by adopting collared rolls and the author discusses this effect. Investigations showed that damage caused at higher reductions, and by adhesion of particles, could be almost completely eliminated by reducing the hardness of back-up rolls from 90 to 60 Shore units by tempering the hardened rolls at 460-480°C. The author gives examples of reductions made possible by the adoption of this new system, e.g. 25% individual and 70-75% total reductions for 10, 30, 50, 70G2XA, 20X and 10G2 steels and total reduction of 60 - 65% for Y10A steel. Average work-roll surface life is said to be over one shift.
There is 1 figure.

AVAILABLE: Library of Congress.

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

GALLAY, Ya.S.; MERIIN, I.M.

Effect of the amount of reduction of a steel strip on roll flattening. Izv. vys. ucheb. zav.; chern. met. 4 no.10:59-65 '61. (MIRA 14:11)

1. Izhevskiy mekhanicheskiy institut.
(Rolling (Metalwork)) (Rolls (Iron mills))

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIIN, L.M., kand. tekhn. nauk, dotsent; STOROZHEV, V.I., inzh.; IVANOV, S.N., inzh.

Investigating the rigidity of a six-roll mill for cold rolling. Izv. vys. ucheb. zav.; mashinostr. no.6:153-159 '65. (MIRA 18:8)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIN, L.M., k. d. tekhn. nauk; DEMCHENKO, G.F.

Increasing the precision of cold rolling of UIGA steel. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.9:5 S '65. (MIRA 18:10)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

BICHUKIN, F.D.; MERIIN, L.M.

Specific pressures in hot upsetting with low degrees of deformation. Kuz. shtam. proizv. 4 no.11:5-9 N '62. (MIRA 15:11)

(Forging) (Pressure)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIKHEYN A.I.

USSR/Chemical Technology. Chemical Products and Their Application -- Wood chemistry products. Cellulose and its manufacture. Paper, I-23

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6256

Author: Merikheyn, A. I.

Institution: None

Title: From the Practice of the Use of Chemicals for Preservation of Wood

Original Publication: Les. kh-vo, 1956, No 7, 47-49

Abstract: Dusting of unpeeled timber with 12% or 25% hexachlorobenzene dust, 5% DDT dust or spraying with a 2-4% oil emulsion of DDT provide good protection against harmful insects (safeguards 82-97% of the wood against damage). Treatment with chemical reagents is a substitute of peeling of the timber at lumber yards.

Card 1/1

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

PASECHNIK, I.Kh.; MERIKOVA, Ye.V.

Vitamin E as an anticholeretic. Vop.pit. 18 no.5:39-42 S-O '59.
(MIRA 13:1)

1. Iz kafedry farmakologii (zav. - zasluzhennyy deyatel' nauki USSR prof. Yu.A. Petrovskiy [deceased]) L'vovskogo meditsinskogo instituta i kafedry farmakologii (zav. - dotsent N.P. Skakun) Ternopol'skogo meditsinskogo instituta.

(VITAMIN E pharmacol.)
(BILIARY TRACT pharmacol.)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILA, Kh.R.

Surgical treatment of trigonal vaginal fistulas by Nazarian's method. Urologiia no.6:68-69'62. (MIRA 16:7)

1. Iz khirurgicheskogo otdeleniya bol'nitsy Kalininskogo rayona Tallina.
(FISTULA, VESICOVAGINAL)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILA, Kh.Ya. [Merila, H.]

Results of the study of the elective crushing of oil shales.
Khim. i tekh. gor. slan. i prod. ikh perer no.13:80-85 '64.
(MIRA 18:9)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILA, Kh.Ya. [Merila, H.]

First plant tests of shale enrichment by selective crushing. Khim. i tekh. gor. slan. i prod. ikh perer. no.11:52-64 '62.
(MIRA 17:3)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

POPOVA, L.A., inzh.; ANTIPINA, V.I.; GRAKHOV, A.N., starshiy inzh.; PERSHINA, M.P., tekhn.; TEREN'T'YEVA, K.A., starshiy tekhn.; ZARINA, Ye.S.; TUULYA-METS, Kh.Yu., inzh.; MERILA, L.A., starshiy inzh.; KUZNETSOV, I.V., red.; EYPRE, T.F., red.; SVITINA, A.A., red.; MOISEYEV, I.N., red.; FLAUM, M.Ya., tekhn. red.

[Hydrological yearbook] Gidrologicheskii ezhegodnik. Leningrad, Gidrometeor. izd-vo. 1957. Vol.1. [Basin of the Baltic Sea] Bassein Baltiiskogo moria. Nos.0-3. [Basins of the Gulf of Finland and the Gulf of Riga from the Russian-Finnish frontier to the northern watershed of the Salaca River] Basseiny Finskogo i Rizhskogo zalivov ot gosudarstvennoi granitsy s Finliandiei do severnogo vodorazdela r. Salatsa. Pod red. I.V.Kuznetsova i T.F.Eipre. 1961. 460 p. (MIRA 14:9)
(Baltic Sea region—Hydrology) (Kama Valley—Hydrology)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 2836-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(b) LJP(c) JD/JG/CG

ACCESSION NR: AT5021772 UR/2613/64/000/028/0003/0019

AUTHORS: Lushchik, N. Ye.; Lushchik Ch. B.; Liyd'ya, G. G.; Meriloo, I. A.

TITLE: Localized electronic excitations of ionic crystals, activated by mercury-like ions

SOURCE: AN EstSSR. Institut fiziki i astronomii. Trudy, no. 28, 1964. Issledovaniya po lyuminestsentsii (Research on luminescence), 3-19

TOPIC TAGS: luminescence property, luminescence research, luminescence, luminescence spectrum, luminescence yield, luminescent crystal, phosphor, gallium, indium, tin, tellurium, lead

ABSTRACT: In order to determine the nature of the excitation and energy migration in activated alkali halide crystals, the excitation spectra of 13 alkali halide crystals activated by Ga, In, Sn, Tl, and Pb in the spectral region 3-10 ev were investigated. The study is an extension of the previously reported work in the spectral region 2-6 ev by N. Ye. Lushchik, (Materialy VII Soveshchaniya po lyuminestsentsii (Kristallofosfory), Tartu, 1959, str. 27). Four series of experiments were performed

I	KF-In,	KCl-In,	KBr-In,	KJ-In,
II	KF-Tl,	KCl-Tl,	KBr-Tl,	KJ-Tl,

Card 1/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 2836-66

ACCESSION NR: AT5021772

III	KCl-Ga,	KCl-In,	KCl-Sn,	KCl-Tl,	KCl-Pb,
IV	KBr-Ga,	KBr-In,	KBr-Sn,	KBr-Tl.	

In series I and II, the activator was fixed (In or Tl), and the anion was varied. In series III and IV, the activator was varied, but the anion remained fixed (KCl or KBr). The experimental procedure followed was that of E. R. Il'mas, G. G. Liyd'ya, and Ch. B. Lushchik, (Opt. i spektr., 1964). Excitation spectra for the systems investigated are presented graphically, and the position of D absorption bands are tabulated. It was found that the excitation bands at the long wavelength tails of exciton absorption bands were almost independent of the activator, but depended substantially on the nature of the host anion. A model for near activator centers is proposed. It is concluded that the phosphors investigated exhibit activator as well as near activator electronic excitations. The authors thank E. R. Il'mas for the development of the ultraviolet vacuum experimental apparatus and R. A. Kink for his help, as well as A. A. Maaroos for the Tl determination in the phosphors. Orig. art. has: 2 tables and 6 graphs.

ASSOCIATION: Institut fiziki i astronomii, AN EstSSR (Institute for Physics and Astronomy, AN EstSSR)

SUBMITTED: 14Feb64 ENCL: 00 SUB CODE: SS, OP

NO REF SOV: 038 OTHER: 011

Card 2/2 BVK

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 2359-66 EWT(l)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD UR/2613/64/000/028/0121/0127

ACCESSION NR: AT5021780

AUTHORS: Yaek, I. V.; Meriloo, I. A.; Savikhin, F. A.

TITLE: Zinc sulfide phosphor with deep traps

SOURCE: AN EstSSR. Institut fiziki i astronomii. Trudy, no. 28, 1964. Issledovaniya po lyuminestsentsii (Research on luminescence), 121-127

TOPIC TAGS: zinc sulfide, phosphor, emission spectrum, thermoluminescence/ DVS 25 lamp, SF 4 monochromator, SPM 1 monochromator, FEU 18 photomultiplier

ABSTRACT: In order to investigate the deep trap thermoluminescence of zinc sulfide phosphors the authors synthesized ZnS-Bi specimens by mixing luminophosphor zinc-sulfide with 3% $BiCl_3$ activator and 4% LiCl melt. The mixture was annealed for 20 min at 1150C in air and rapidly cooled. The emission and excitation spectra were measured by using two monochromators, and a hydrogen lamp was used for excitation. The thermoluminescence curves showed two temperature peaks at T = 570K and T = 460K. The specimen also showed a single maximum red band at a wavelength of 610 nm. The high temperature thermoluminescence peaks are connected with thermal quenching phenomena as shown in Fig. 1 on the Enclosure. The last intensity drop on these curves occurs around 550K. It is shown that this rather unusual shift to high

Card 1/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L 2359-66
ACCESSION NR: AT5021780

temperature in ZnS thermal quench properties reveals the existence of deep traps in the material. The authors thank Ch. B. Lushchik for his guidance in this work. Orig. art. has: 3 figures.

ASSOCIATION: Institut fiziki i astronomii, AN EstSSR (Institute of Physics and Astronomy, AN EstSSR)

SUBMITTED: 20Jan64 ENCL: 01 SUB CODE: IC, GC

NO REF SOV: 005 OTHER: 005

Card 2/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

L2359-66
AT5021780

ENCLOSURE: 01

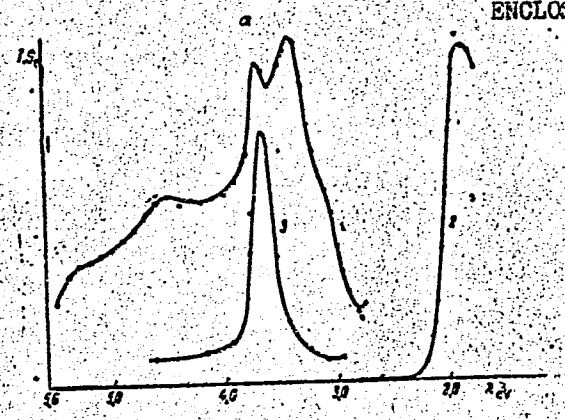

Рис. 1,а. Спектры возбуждения (1), излучения (2) и возбуждения термолюминесценции для пика с T_m = 570° K (3), фосфора ZnS-Bi.

Fig. 1a Spectra of excitation, (1) emission, (2) and excitation of thermoluminescence for a peak with T_m = 570°K, (3) for phosphorous ZnS-Bi.

3/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACC NR: AP7004990 SOURCE CODE: UR/0048/66/030/009/1517/1520

AUTHOR: Lushchik, N.Ye.; Meriloo, I.A.

ORG: none

TITLE: Crystal phosphors with mercury-like activators and the problem of predicting the spectra of new phosphors /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no.9, 1966, 1517-1520

TOPIC TAGS: luminescence spectrum, excitation spectrum, luminescent crystal, activated crystal, crystal phosphor

ABSTRACT: On the basis of data in the literature (many of them from their own laboratory) the authors discuss the luminescence excitation spectra of a large number of mercury-like ion activated phosphors. Excitation spectra of In activated KF, CaF_2, CaO, $Ca_3(PO_4)_2$, $3Ca_3(PO_4)_2$, K_2SO_4, HBr, and CaS phosphors and Tl activated KF, $Ca_3(PO_4)_2$, and K_2SO_4 phosphors are presented by way of examples and are discussed in some detail, different excitation peaks being ascribed to definite electronic transitions in the activator ion. For the prediction of the excitation spectrum of an unknown phosphor, use is made of the equation $E_F/E_B = 1 + aE_F$ relating the energy E_F of an electronic transition in the free activator ion with the energy E_B of the same transition in the same ion when it is bound in the host lattice. The coefficient a

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ACC NR: AP7004990

is tabulated for 7 different activator ions in 10 different host lattices. The table shows that the value of a depends strongly on the charge of the activator ion but varies little for different activator ions of the same charge in a given host lattice. Regularities are also noted in the variations of a for a given activator ion in different host lattices. With the aid of these regularities and the tabulated values, one can obtain an approximate value of a for a new activator ion in a new host lattice, and thereby predict the positions of the peaks in the excitation spectrum of the proposed new phosphor. Orig. art. has: 1 formula, 2 figures, and 1 table.

SUB CODE: 20 SUBM DATE: none ORIG. REF: 013 OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

GAYVORONSKIY, A.G.; GASMAN, I.I.; GOROZHANKIN, V.I.; MERILOV, A.Ya.; KARGOPOLOV, V.A., inzhener, redaktor.

[Manual on the DT-54 tractor] Rukovodstvo po traktoru DT-54. Pod red. B.A.Kargopolova. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1953. 307 p. (MLRA 7:2)
(Tractors)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILOV, A.Ya.

Trends of the further development of caterpillar tractor design. Avt. trakt.prom. no.11:6-9 N '54. (MLRA 8:1)

1. Stalingradskiy traktornyy zavod.
(Tractors--Design and construction)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILOV, A.Ya.

Observations on the project of possible tractor types. Trakt. i sel'khozmash. 33 no.8:8-9 Ag '63. (MIRA 16:11)

1. Glavnyy inzh. Vsesoyuznogo nauchno-issledovatel'skogo instituta tekhnologii mashinostroyeniya.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILYAYNEN, S. K.

USSR/Chemistry - Physical chemistry

Card 1/1 : Pub. 147 - 13/21

Authors : Pshezhetskiy, S. Ya.; Lyubarskiy, G. D.; Shcheglova, N. A.; and Merilyaynen, S. K.

Title : Relation between the kinetics of catalytic dehydrogenation of hydrocarbons and the structure of the latter. Part 3.- Comparison of kinetics data for n-butane and n-butylene; probable mechanism of dehydrogenation reaction

Periodical : Zhur. fiz. khim. 8, 1458-1464, Aug 1954

Abstract : The difference between the reaction of n-butane and n-butylene dehydrogenation kinetics and the reaction of these hydrocarbons with the catalyst was established by comparing kinetics data. The presence of a double C=C bond in the butylene molecule was considered to be the basic cause for a more intensive reaction of this hydrocarbon in comparison with that of n-butane. The formation of intermediate surface compounds of the adsorbed radical type and consequent separation of the second H-atom was thought to be the most probable reaction mechanism. Three references: 2-USSR and 1-USA (1948-1954). Tables; graphs.

Institution : The L. Ya. Karpov Physico-Chemical Institute, Moscow

Submitted : November 13, 1953

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILYAYNEN, S. K.

USSR/ Chemistry Physical chemistry

Card : 1/1 Pub. 147 - 14/25

Authors : Lyubarskiy, G. D., Merilyaynen, S. K., and Pshezhetskiy, S. Ya.

Title : Kinetics of dehydrogenation of n-butane

Periodical : Zhur. fiz. khim. 28/7, 1272 - 1279, July 1954

Abstract : The kinetics of dehydrogenation reaction of n-butane over an aluminum-chromate catalyst, was investigated at 460 - 500° and partial butane pressures of 0.1 - 1 atm. Equation, describing the kinetics of the dehydrogenation reaction, is presented. The activation energy of the dehydrogenation reaction was established at 40,000 ± 1,000 cal./mol. The reduction in the rate of butane dehydrogenation, due to the addition of butylene and H, is presented graphically. The inhibiting effect of H and butylene, is explained. Five references: 3 USA; 1 English and 1 USSR (1944 - 1954). Tables.

Institution : The L. Ya. Karpov Physico-Chemical Institute, Moscow

Submitted : November 13, 1953

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILYAINEN, S.K.

USSR.

62

Dependence of the kinetics of catalytic dehydrogenation of hydrocarbons on their structure. III. Comparison of kinetic data for butane and butylene; probable mechanism of dehydrogenation reactions. S. Ya. Pshezhetskiĭ, G. D. Lyubarskiĭ, N. A. Shchegolova, and S. K. Merilyainen (L. Ya. Karpov Phys.-Chem. Inst., Moscow). *Zhur. Fiz. Khim.* 28, 1458–64(1954); cf. *C.A.* 49, 7937*h*.—The catalytic dehydrogenation of butane (I) and butene (II) is discussed on the basis of data reported earlier (*loc. cit.*). The greater vigor of the reaction of II with the catalyst is due to the presence of the C:C bond. The reaction proceeds through formation of intermediate surface compds. such as adsorbed free radicals, followed by removal of a 2nd H atom. Kinetic equations are derived on the assumption that the catalyst surface is effectively homogeneous; they are in accord with expt. J. W. Loweberg, Jr.

(3)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERILYAYNEN, S.K.

7
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8

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4529. THE RELATION OF HYDROCARBON STRUCTURE AND THE KINETICS OF CATALYTIC DEHYDROGENATION. Fehezhetskii, A.Ye., Lyubarskii, G.D., Shcheglova, N.A. and Merilyainen, S.K. (Moscow: Acad. Sci. U.S.S.R., 1955, "Problems of Chemical Kinetics, Catalysis and Reactivity (Voprosy Khimicheskoi Kinetiki, Kataliza i Reaktisonnoi Sposobnosti)", 535-547; abstr. in Chem. Abstr., 1956, vol. 50, 10387). It was found that the kinetics of the dehydrogenation of n-butane are represented by a different equation than those of n-butylene, and that considerable differences exist in the apparent activation energy values for the two compounds. These variations point to a considerable difference in the interaction with the catalyst, and the much more energetic action of n-butylene is apparently due to its double bond. The available data indicate that the probable mechanism of this reaction includes the formation of intermediate surface compounds, similar to free radicals, followed by the splitting off of the second hydrogen. Kinetic equations derived from such a scheme, and an effective uniformity of the catalyst surface, are in satisfactory agreement with experimental data.

Chem

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APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIMAA, O.

Cadres are a decisive force in trade-union leadership. Sov. profsoiuzy 6 no.2:21-26 F '58. (MIRA 11:3)

1.Sekretar' TSentral'nogo komiteta Kommunisticheskoy partii Estonii.
(Estonia--Trade unions)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

MERIMAN, G.A.

USSR, Astronomy - Three body problem

Card 1/1 Pub. 22 - 11/63

Authors : Meriman, G.A.

Title : On the sufficient conditions of the gripping in the problem of three bodies

Periodical : Dok. AN SSSR 99/6, 925-927, Dec 21, 1954

Abstract : Results obtained in the solution of the three body problem for a special case are discussed in connection with application to the complete problem of three bodies (generalization of the problem). Eight USSR references (1947-1953).

Institution: The Institute of Theoretical Astronomy of the Acad. of Scs. of the USSR

Presented by: Academician O. Yu Schmidt, September 29, 1954

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001033

"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

USSR / Human and Animal Physiology. The Effect of Physical Factors. Ionizing Irradiations. T

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102356.

Author : Shparo, L. A.; Fokina, T. V.; Merimova, T. D.
Inst : Not given.
Title : The Sensitivity of Animals of Different Ages to General Roentgen Irradiation.

Orig Pub: Tr. Vses. konferentsii po med. radiol. Eksperim. med. radiol. M., Medgiz, 1957, 76-81.

Abstract: Rats (265) of various age groups were irradiated with a dose of 250-1000 r. Animals up to 6 weeks old turned out to be more radiosensitive than adults. Newborn rats were distinguished by the greatest radio sensitivity; they died without exception even after 250 r. In rats 2-15 days old, radiation sickness developed somewhat more slowly

Card 1/2

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MERIMSKIY, L.I., inzh.; SAYKO, A.P., inzh.

Shaft sinking without [illegible]. Shakht.stroi. no.[illegible]

1. Normativno-issledovatel'skaya stantsiya No.15 komoinata Stalinshakhtostroy.

(Shaft sinking)

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MER'MEKIY, N.

Waste products are made into articles. Prom. koop. no.5:28 My '58.
(MIRA 11:4)

1. Rukovoditel' planovoy gruppy arteli "Mekhanik," Kazan'.
(Factory and trade waste)

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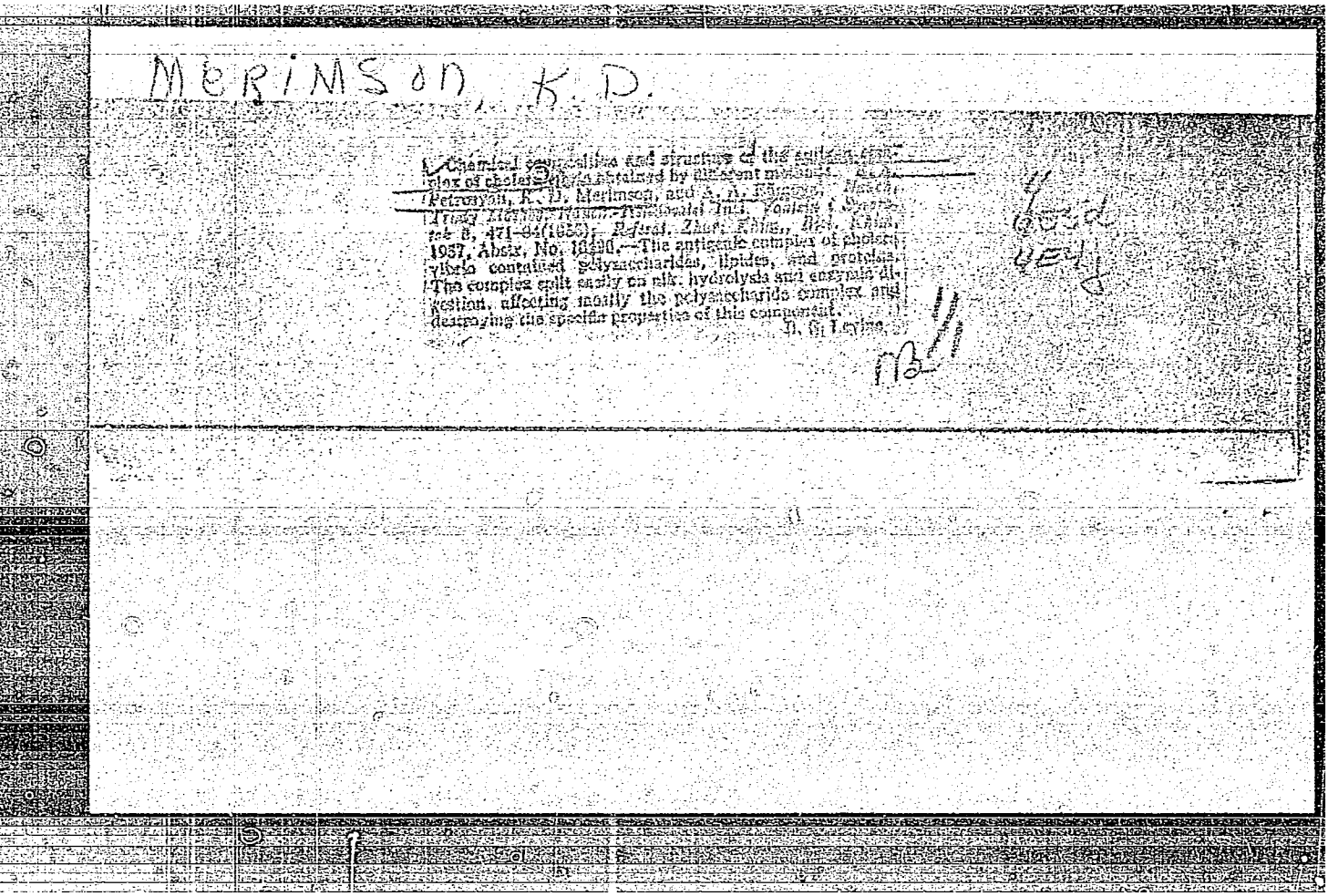
"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103



MERIMSON, K. D.

Chemical composition and structure of the antigen complex of cholera vibrio obtained by different methods. [illegible] Petrosyan, K. D. Merimson, and A. A. [illegible] [illegible] Trudy [illegible] Nauch.-Issledovatel Inst. Vaktsin i Syvorotok 8, 471-84(1956); Referat. Zhur. Khim., Biol. Khim. 1957, Abstr. No. 16390.—The antigenic complex of cholera vibrio contained polysaccharides, lipides, and proteins. The complex split easily on nik. hydrolysis and enzymic digestion, affecting mostly the polysaccharide complex and destroying the specific properties of this component.

D. S. Levine

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USSR/Mictobiology. Micbobes Pathogenic for Man and Animal F

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57649

Author : Petrosyan Ye. A., Merimson K. D., Anufriyeva Ye.
Inst : Moscow Scientific-Research Institute of Vaccines and Sera
Title : Investigation of the Immunogenic Properties of Complete Antigens Obtained by the Extraction of Trichloroacetic acid

Orig Pub : Nauch. tr. Mosk. n.-i vaktsin i syrovorotok, 1956, 8, 74-78

Abstract : Antigens from mixtures of productive strains of typhoid and Grigor'yev-Shiga and Flexner's dysentery bacteria prepared according to the Buaven method were studied. It was shown that the complete antigens obtained from the mixture of

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MERIMSON, R.S.

Cholecystitis in children according to data of the Faculty Pediatric Clinic. Sbor. nauch. trud. Ivan. gos. med. inst. no. 28:158-161 '63 (MIRA 19:1)

1. Ia kafedry fakul'tetskoy pediatrii (zav. - dotsent O.M. Iago) Ivanovskogo gosudarstvennogo meditsinskogo instituta (rektor - dotsent Ya. M. Romanov).

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00103

ANAPREYCHIKOV, V.V.; MERIMSON, Ya.L.

Automatic reporting system. Avtom., telem. i sviaz' 4 no.10:26-27 O '60. (MIRA 13:10)

1. Nachal'nik Leningrad-Baltiyskoy distantsii signalizatsii i svyazi Oktyabr'skoy doroti (for Anapreychikov). 2. Starshiy inzhener Leningrad-Baltiyskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi (for Merimson).
(Railroads--Communication systems)

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