"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKIEWICZ, W.

"Multiple high-pass resistance-capacity filter as an intake circuit of the selective high frequency voltmeter." p.76. (PRACE Vol. 5, No. 13/14. 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions. (EEAL). LC. Vol. 4, No. 4. April 1955. Uncl.

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[illegible]

Rotkiewicz W., P. Sc.

Rotkiewicz W., P. Sc. (Eng.). "The Influence of Aerial Coupling on the Suppression of Image Interference in Superheterodyne Receivers." (Wplyw rodzaju sprzezeniz obwodu wejsciowego z antena na tlumienie sygnalow lustrzanych w odbiornikach superheterodynowych). Przeglad Telekomunikacyjny, No. 1, [illegible], pp. [illegible], 7 figs., 2 tabs.

An examination of the influence of the different kinds of aerial coupling on the suppression of image interference in superheterodyne receivers. Capacitive, inductive and mixed couplings are discussed. Results of calculating for medium wavelength are given in the form of a table and a graph.

SO: Polish Technical Abstracts - No. 2, 1951

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ACC NR: AP6023799 SOURCE CODE: PO/0022/65/000/008/0234/0235

51

B

AUTHOR: Rotkiewicz, Wilhelm (Professor); Pietranik, Miroslaw (Master engineer)

ORG: Warsaw Polytechnic Institute, Warsaw (Politechnika Warszawska)

TITLE: Interference in radio reception caused by selenium rectifiers

27

SOURCE: Przeglad telekomunikacyjny, no. 8, 1965, 234-235

TOPIC TAGS: radio reception, signal interference, selenium rectifier

ABSTRACT: The article presents results of measurements which were made on the continuous spectrum in heterodyne radiation. This continuous spectrum, which appears alongside the discrete spectrum in certain types of radio receivers, was found to be caused by the selenium rectifier. The overall measuring circuit is shown and curves of interference as a function of a) frequency, b) supply voltage. Certain general conclusions are drawn, namely that the interference level decreases with increasing frequency, but increases with aging of the selenium rectifier. A variation of several tens of decibels in the interference level was found between various makes and models of receivers. The importance of considering this in the design and construction of equipment is emphasized. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 17, 09 / SUBM DATE: none / ORIG REF: 002

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AUTHOR: Rotkiewicz, Wilhelm, Professor

TITLE: Research on Amplitude Modulation Suppression in FM Receivers

PERIODICAL: Przegląd Telekomunikacyjny, 1959, No. 12, pp. 337 - 342

TEXT: The author introduces the article with a review of methods used in measuring amplitude modulation suppression in FM receivers based on CCIR (International Radio Consultative Committee) recommendations; he describes a spectrum analysis method, a pertinent new measuring method using a selection voltmeter, and discusses optimum parameters of the test signal. The spectrum analysis method is used to record the spectrum at the output stage of a receiver during an AM-FM signal input and to make out those components of the spectrum, which are caused by amplitude modulation. If the value of these components and of the basic component, which corresponds to the frequency modulation, are established, the suppression of amplitude modulation is computed according to the equation:

$$\delta = 20 \lg \frac{U_{f1}}{\sqrt{\sum_{m=1}^{m=\infty} U^2_{mf_2} + \sum_{m'=1}^{m=\infty} \sum_{n'=}^{n=\infty} U^2 \left| mf_2 \pm nf_1 \right|}}$$

Card 1/3

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Research on Amplitude Modulation Suppression in FM Receivers

where f_1 - FM frequency
f_2 - AM frequency

The first sum under the square root represents the basic component and AM harmonics, the second sum represents intermodulation components. According to the author, the spectrum analysis is the most accurate method of measuring AM suppression, though at the same time it is the most tedious one. The spectrum analysis method is applicable for arbitrary modulation factors and frequencies, permits evaluation of filtering methods, choice of the best method and selection of optimum parameters of the test signal. To this end, several FM radio receivers have been analyzed at the Instytut Tele i Radio-Techniczny (Institute of Telecommunication and Radio Engineering) in Warsaw for spectra occurring at the detector output under a frequency and amplitude-modulated input signal. The tests were carried out by means of a harmonic analyzer directly connected to the detector output, in order to eliminate low-frequency amplifier distortion. Characteristical examples of spectra obtained in these tests are shown in Figures 7, 8. Spectrum components reflecting the basic FM frequency are marked with tiny rings; the level of these components is independent from the AM factor. The spectrum shown in Figure 7 was recorded under an FM modulation by a signal of 400 cps. (m = 100%) and an AM modulation by a signal of

Card 2/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

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P/022/59/000/12/2/10

Research on Amplitude Modulation Suppression in FM Receivers

1,000 cps. (m = 30%). The spectrum shown in Figure 8 was recorded under CCIR standards, namely an FM modulation by 100 cps. (m = 30%) and an AM modulation by 1,000 cps. (m = 100%). The input signal in both cases had a level of -60 db (mW). The author compares the spectrum analyses shown in Figures 7 and 8 and arrives at the conclusion that the standards set by the CCIR are the most efficient ones. Laboratory tests pertinent to the author's analysis were carried out by Graduate Engineer W. Paruszewska. There are 10 figures and 9 references, 5 of which are English, 2 French, 1 Polish and 1 German.

ASSOCIATION: Politechnika Wrocławska (Polytechnical Institute, Wrocław).

Card 3/3

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKIEWICZ, W.

W. Rotkiewicz (Wroclaw), "Ueber Selektivitaetsmessfehler," Nachrichtentechnik (Berlin), 8/1, January 1958, pp. 22-24.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKIEWICZ, W.

Rotkiewicz W. Measurement Errors Encountered when Taking Selectivity Curves of the Wireless Receiver by the Single Signal Method.

„Błędy pomiarowe występujące przy zdejmowaniu krzywej selektywności odbiornika radiowego metodą jednego sygnału". Przegląd Telekomunikacyjny. No. 3, 1936, pp. 67—71, 10 figs.

The possible occurrence is discussed of considerable measuring errors when taking selectivity curves of wireless receivers working with automatic amplitude regulation. Moreover, attention is drawn to additional errors caused by inherent noises and too high a frequency of modulation. Experimental results are given, together with a determination of measuring conditions, which make it possible to reduce these er...

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ROTKIEWICZ, W.; WOJNAR, A; LASZCZYNSKI, R.

Radio-phonograph receiver. p. 43.

TELE-RADIO. (Stowarzyszenie Elektrykow Polskich. Sedcja Telekomunikacyjna) Warszawa, Poland. Vol. 5, No. 15, 1955.

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

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKIEWICZ, W.

POLISH TECHNICAL ABSTRACTS

Vol. 26, Nr. 2, 1957

Rotkiewicz W. Disturbing Radiation of Broadcast Receivers I. Radiation of the Receiver and its Sensitivity to Disturbances from the Power Line.

„Emisje zakłócające powodowane przez odbiorniki radiofoniczne. I. Promieniowanie odbiornika oraz wrażliwość odbiornika na zakłócenia przenikające z sieci zasilającej". (Prace Inst. Łączn. No. 2(4)), Warszawa, 1956, PWT, 43, pp. 32 figs., 21 tabs.

The author examined the principal possible ways of heterodyne and intermediate-frequency leaks in superheterodyne receivers, as well as the effect of disturbing voltages from the power line. Also taken into consideration were the unfavourable influence of the high earthing resistance, the interdependence of the voltages entering the antenna circuit and the power line, and the influence of the filtering circuits. The results of measuring H. F. voltage leaks from the receiver into the antenna and power-line circuit are followed in this paper by a comparison of the filtering circuits, used also to reduce H. F. voltage leaks from the receiver into the power line. It is demonstrated that inductive filters are most effective, whereas capacitive filters may prove unfavourable. The influence of the electrostatic screening of the power transformer is comparatively small, the screening of receivers being of greater importance.

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6(4) PHASE I BOOK EXPLOITATION POL/2358

Rotkiewicz, Wilhelm, Master Engineer, Professor of the Wrocław Polytechnic

Technika odbioru radiowego (Radio Receiving Techniques) v.2. Warszawa, Państowe Wydawnictwa Techniczne, 1954. 451 p. Errata slip inserted. 8,140 copies.

Reviewers: Groszkowski, J., Professor, Doctor, Engineer, and St. Darecki, Professor, Master Engineer; Scientific Ed. of Publishing House: M. Lewandowski, Engineer. Tech. Ed.: T. Kopyt.

PURPOSE: This book is intended for students in the communications departments of polytechnic institutes and engineering schools. It may also be used as a reference book by engineers and technicians engaged in the design of radio receivers and components.

COVERAGE: In this second volume the author discusses radio interferences and distortions and describes feedback and control circuits. He explains various types of interferences

Card 1/16

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and describes their effect on AM and FM reception. He also discusses methods of tracking and aligning receiver tuned circuits. Methods of calculating local-oscillator and high-frequency circuit parameters for superheterodyne receivers are also presented. The author discusses the principle of operation of various control circuits such as manual and automatic volume control, tone control, automatic frequency control, eliminator circuits and interference limiters. He thanks Professor J. Groszkosski, Doctor, Engineer, and Professor S. Darecki, Master of Science in Engineering, for reviewing the text. He also thanks A. Wojnar, Master of Science in Engineering, for making his thesis material available to the author. There are 32 references: 16 Soviet, 4 English, 4 Polish (including 1 translation) and 8 German.

TABLE OF CONTENTS:

Ch. 5. Reception Interference 15
1. General information 15
1. Definition of reception interference and evaluation of reception quality 15

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

2. Basic interference signals and their nature 17
3. Determination of continuous spectra of single pulses 21
4. Effect of distance on the nature of interferences 25
5. Analysis of the effect of interferences on a receiver 26
   1. Continuous sinusoidal interferences. AM receiver 26
   2. Amplitude-modulated interferences. AM receiver 27
   3. Single interference pulses. AM receiver 31
   4. Noise interference. AM receiver 33
   5. Sinusoidal continuous interferences. FM receiver 39
   6. Modulated interference. FM receiver 43
   7. Single interference pulses. FM receiver 44
   8. Noise interference. FM receiver 45
   9. Curves of compensation coefficient for an FM receiver 47

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

2. Atmospheric interferences 48
1. Sources of atmospheric interferences 48
2. Atmospheric interference waves, their intensities and their effect on a receiver 53
3. Methods of decreasing the effect of atmospheric interferences and preventing damages to radio devices 57
4. Field intensity of a useful signal 58
5. Cosmic interferences 60
3. Industrial interferences 62
1. Sources of industrial interferences and interference spectra 62
2. Propagation of industrial interferences and their appearance in a receiver 64
3. Types of industrial interferences and their effect on the output of a receiver 66
4. Degree of tolerance of industrial interferences 67
5. Methods of suppressing industrial interferences 70
6. Suppression of industrial interferences in a transmission line. Theoretical considerations 72

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

7. Anti-interference capacitors and chokes 81
8. Anti-interference filters 87
   1. Devices used in practice 87
   2. Design of anti-interference filters 91
9. Typical sources of interference equipped with anti-interference devices 97
   1. Electric bells 97
   2. Electric machines 98
   3. Rectifiers 101
   4. Switches and sliding-contact 102
   5. Electrical devices used in medicine 103
   6. Neon signs 104
   7. Spark-plug devices for internal combustion engines 104
   8. Electric traction 105
   9. High-voltage transmission lines and networks 106
   10. Concentration of interference sources 107
10. Interference transfer coefficient 107
11. Anti-interference devices used with antennas 108

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

12. Anti-interference filters used in receivers 111
13. Compensation of interferences in a receiver 112
4. Transmitter and receiver interferences 115
5. Intrinsic noise 116
1. Introduction 116
2. Thermal noise of individual receiver components 117
3. Antenna noise 124
4. Tube noise 126
5. Structural and random noise 134
6. Circuit hum 135
7. Receiver noise 141
8. Noise factor 145

Ch. 6. Reception Distortions 148
1. General information 148
2. Distortions in a high-frequency amplifier 153
1. Distortions of amplitude modulation in linear circuits 153
2. Distortions of frequency modulation in linear circuits 161

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

3. Distortions of amplitude modulation in nonlinear circuits 169
4. Secondary modulation 174
5. Parasitic modulation 178
6. Relationship between various types of distortion in nonlinear circuits 182
7. Control tubes 184
8. Effect of circuit nonlinearity on frequency modulation 190
3. Distortion during frequency conversion 191
1. Distortions due to nonlinearity of mixer characteristics 192
2. Whistle-type interference 196
4. Distortion during detection 204
1. Distortion during amplitude-modulation detection 204
2. Distortion during frequency-modulation detection 208
5. Distortions in audio-frequency amplifiers 209
1. Distortions in voltage amplifiers 209
2. Distortions in power amplifiers 213
3. Nonlinear distortions caused by low-frequency transformers 222

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

6. Transients in a receiver 223
   1. General information 223
   2. Methods of analyzing transients 224
   3. Transients in a single-tuned amplifier 230
   4. Transients in a double-tuned amplifier 234
   5. Transients in an RC-coupled amplifier 237
7. Distortions during radiotelegraph reception 239
8. Distortions during radiotelephone reception 242
9. Distortions during broadcast reception 242

Ch. 7. Negative Feedback 246
   1. General information 246
   2. Block diagrams and basic principle of operation 247
      1. Series voltage feedback 248
      2. Series current feedback 249
      3. Series combined (voltage-current) feedback 249
      4. Parallel feedback 250
      5. Multiloop feedback 255
      6. Balanced feedback 255

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

3. Effect of feedback on amplifier operation 258
1. Effect of feedback on amplifier stability 259
2. Effect of feedback on characteristic parameters 261
1. Voltage feedback 262
2. Current feedback 263
3. Combined feedback 263
4. Multiloop feedback 264
3. Characteristics and characteristic parameters of a tube with negative feedback 266
4. Effect of feedback on amplifier input impedance 271
5. Effect of feedback on nonlinear distortions and interferences 273
6. Effect of feedback on linear distortions 276
7. Effect of feedback on amplification stability 280
8. Effect of feedback on loudspeaker operation 281
4. Examples of feedback circuits 282
1. Circuits with a series negative voltage feedback 282

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

2. Circuits with a parallel negative voltage feedback 285
3. Circuits with a series negative current feedback 286
4. Circuits with a negative feedback enclosing two stages 286
5. Push-pull circuits with a negative voltage feedback 288
6. Preamplifier with a phase shift and a negative feedback 290
7. Circuits with a balanced multiloop feedback 292
8. Circuit with a feedback to the screen grid 294
9. Cathode follower (grounded-plate amplifier) 295
10. Cathode follower as a preamplifier for push-pull circuits 299
11. Devices with a negative feedback decreasing circuit hum 300
12. Devices with a negative feedback increasing circuit hum 302

Ch. 8. Control and Auxiliary Devices 305

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

1. Receiver tuning and frequency-band switching 305
1. General information 305
2. Characteristics of variable capacitors 308
3. Tracking and alignment of high-frequency amplifier circuits 310
4. Tuning of superheterodyne receivers 320
1. Methods of tracking and aligning high-frequency circuits and a hyterodyne oscillator 320
2. Double-spot tuning 322
3. Three-spot tuning 327
4. Analysis of three-spot tuning errors 332
5. Design of circuits for three-spot tuning 335
6. Compensation of three-spot tuning errors 340
7. Widening of short-wave bands 343
5. Frequency-band switching 346
6. Pushbutton tuning 350
1. Mechanical systems for pushbutton tuning 350
2. Electromechanical systems for pushbutton tuning 352
3. Electrical systems for pushbutton tuning 353
7. Remote tuning 354
1. Remote tuning with the aid of an electric motor 354
2. Remote tuning with the aid of relays 355

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

3. Remote tuning with the aid of a frequency changer 357
4. Remote tuning with the aid of a long line 357

2. Automatic frequency control 358
1. Principle of operation of automatic frequency control 358
2. Control circuits with a reactance tube 361
3. Efficiency of automatic frequency control 363

3. Volume control 366
1. General information 366
2. Manual volume control 366
1. Control at the input circuit 367
2. Control based on the principle of changing tube transconductance 368
3. Control at the input circuit by means of changing antenna coupling and grid voltage 370
4. Control in the audio-frequency amplifier circuit 370
3. Automatic volume control 372
1. Purpose and principle of operation of automatic volume control 372
2. Time constant of a circuit with automatic volume control 375

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

3. Delayed automatic volume control 378
4. Automatic volume control with an additional amplifier 382
5. Automatic volume control in the audio-frequency amplifier circuit 384
6 Automatic volume control for telegraph reception 385
7. Design of circuits with automatic volume control 386

4. Visual tuning indicators 289
1. General information 289
2. Milliammeter as a tuning indicator 390
3. Glow-tube tuning indicator 390
4. Electronic tuning indicator (magic eye) 391
1. General information 391
2. Electronic tuning indicator with a pentode 394
3. Electronic tuning indicator for operation with weak and strong signals 294
5. Tuning indicator using pilot lamps 396

5. Tone control 397
1. General information 397

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

2. Circuits for controlling upper frequencies 398
3. Circuits for controlling lower frequencies 401
4. Circuits for controlling both upper and lower frequencies 402
5. Circuits for controlling medium frequencies 403
6. Tone-compensated volume control 404
7. Tone control in a feedback circuit 405
8. Automatic tone control 409

6. Volume expander 409
7. Selectivity control 412
1. General information 412
2. Bandwidth control with the aid of an additional resistor in the resonant circuit 413
3. Continuous bandwidth control of a bandpass filter by changing the value of the inductive coupling 413
4. Bandwidth control of a bandpass filter by abruptly changing the value of the inductive coupling 414
5. Continuous bandwidth control of a two-mesh bandpass filter by changing the value of the capacitive coupling 415

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

6. Bandwidth control of a two-mesh bandpass filter by abruptly changing the value of the capacitive coupling 415
7. Bandwidth control of a three-mesh filter 417
8. Bandwidth control of a four-mesh filter 417
9. Bandwidth control of a multistage double-tuned amplifier 418
10. Automatic bandwidth control 419

8. Receiver anti-interference devices 421
1. Types of devices 421
2. Eliminators of interfering stations 422
1. General requirements 422
2. Series eliminators 423
3. Parallel eliminators 425
4. Other types of eliminator circuits 426
3. Interference limiters 426
4. Eliminators of pulse interferences 429
5. Decrease of volume during tuning 433
6. Eliminator for 9kc whistling 436

9. Switching systems for reception of local stations 437

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

Radio Receiving Techniques POL/2358

10. Shielding 438
1. Electric field 439
2. Magnetic field 442
3. Design of shielding 444
11. Decoupling 448

Appendix 450

Bibliography 452

AVAILABLE: Library of Congress (TK 6563.R6 t·2)

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Card 16/16

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

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ROTKIEWICZ W

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[52]

* Rotkiewicz W. Wireless Reception Technique. Vol. 2.
„Technika odbioru radiowego". Tom 2. Warszawa, 1954, PWT, 16°, 162 pp., 433 figs., 22 tabs.

Volume 2 deals with interferences and distortions in reception, negative feedback, as well as with control and auxiliary equipment. Review of the various types of interferences, their effect on AM and FM receivers, and methods of inhibition. Detailed survey of interference of various types. Fundamental formulae, with examples, for computing negative feedback systems. Detailed review of the problem of collineation of tuned circuits in receivers, with formulae for computing high frequency and heterodyne circuits in superheterodyne receiving sets. The author next deals with the functioning of various control and auxiliary devices, including manual and automatic control of amplification, tone control, automatic fine tuning, eliminators, interference suppressors and a number of other devices.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKIEWICZ, Wilhelm, prof.; LECZYCKI, Stanislaw, mgr inz.

Magnetic field generator for the 0.15—25 mc/s frequency range. Przegl telekom 35 [i.e. 36] no. 12: 349-351 D '63.

1. Politechnika, Wroclaw.

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ROTKIEWICZ, WILHELM

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SO: Monthly list of East European Accessions, LC, Vol. 3, No. 1, Jan. 1954, Uncl.

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PHASE I BOOK EXPLOITATION

[illegible]

Akademiya nauk SSSR. Komitet po meteoritam

Meteoritika; sbornik statey, vyp. 16 ([illegible]) Moscow, 1958. 209 p. Errata slip [illegible] 1,300 copies printed.

Ed.: V.G.Fesenkov, Academician; [illegible] ing House: L.K. [illegible]

PURPOSE: This publication is [illegible] physicists, and other [illegible]

COVERAGE: This collection [illegible] meteorites, and [illegible] ferents on Meteorites [illegible] Sciences USSR, [illegible] deal with the origin [illegible] elements in the solar [illegible] craters on the earth [illegible] fell in the Ukraine [illegible] Sikhote-Alin' [illegible] tion, structure, and [illegible] scribes the activities of the [illegible] ony, Institute of Physics, Bulgarian [illegible] are mentioned.

TABLE OF CONTENTS:

TRANSACTIONS OF THE [illegible] CONFERENCE OF METEORITES

Levin, B.Yu., and G.L. Slonimskiy. On the Problem of the Origin of Meteoritic Chondrules 30

Divari, N.B. Final Elements in the Atmospheric Trajectory of the Sikhote-Alin' Meteorite (Summary of a Report) 37

Krinov, Ye.L. Circumstances Attending the Fall of the Sikhote-Alin' Iron Meteorite Shower (Summary of a Report) 39

D'yakonova, M.I. Chemical Composition of the Sikhote-Alin' Meteorite 42

Kvasha, L.G. Mineral Composition and Structure of the Sikhote-Alin' Iron Meteorite (Summary of a Report) 49

Kolomenskiy, V.D., and I.A. Yudin. Mineral Composition of the Crust of the Sikhote-Alin' Meteorite and of Meteoritic and Metamic Dust 59

Aleksayeva, K.N. Physical Properties of Stone Meteorites and Their Interpretation in the Light of Hypotheses on the Origin of Meteorites 67

Yudin, I.A. Opaque Minerals in Stone Meteorites 78

Dreyzin, R.L. Results of a Study of the Circumstances During the Fall of the Kryaka Stone Meteorite Shower 105

Aaloe, A. Recent Data on Meteoritic Craters on the Island of Saaremaa in the Estonskaya SSR 108

Bonev, N. [Corresponding Member of the Bulgarian Academy of Sciences]. The Meteoritic Hypothesis of the Origin of Lunar Craters 115

Zotkin, I.T. The Popularization of Meteoritics (Abridged Report) 121

Pokshivnitskiy, G.S. The Morasko Meteorite 123

Starik, I.Ye., K.A. Petrzhak, M.M. Shats, I.N. Semenyushkin, and M.A. Bak. Occurrence of Uranium in Meteorites and Its Isotopic Composition 126

Rotko, M.A. The Study of Minerals in Meteorites by the Method of Luminescence Analysis 131

Vorob'yev, G.G., and O. Namnandorzh. Mongolian Meteorites 134

Sushitskiy, P.I. Results of a Study of a Bolide Observed in the Ukraine on June 30, 1954 137

Yudin, I.A. Bolides in the Urals 140

Bonev, N. [Corresponding Member of the Bulgarian Academy of Sciences]. A New Center for the Study of Meteorites in Bulgaria

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKO, M.A.

Using luminiscence analysis in studying minerals of meteorites. (MIRA 11:8)
Meteoritika no.16:131-133 '58.
(Meteorites) (Luminiscent substances)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzh. (Odessa)

Power characteristics of an induction motor in a system with pulse speed control. Elektrichestvo no.11:38-42 N '58. (MIRA 11:12)
(Electric motors, Induction)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, Leonid L'vovich, kand.tekhn.nauk, starshiy nauchnyy sotrudnik

Calculation of the parameters of adjustment of multichannel two-positional controllers. Izv.vys.ucheb.zav.; elektromekh. 8 no.7:775-784 '65. (MIRA 18:8)

1. Odesskiy proyektno-konstruktorskiy institut kompleksnoy avtomatizatsii proizvodstvennykh protsessov v pishchevoy promyshlennosti.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., kand.tekhn.nauk

Characteristics of an electric drive consisting of an uncontrolled rectifier and motor system. Vest. elektroprom. 33 no.3:40-45 Mr '62. (MIRA 15:3)
(Electric driving) (Electric current rectifiers)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzh.; ROZENFEL'D, A.I., inzh.

Filter protection of induction motors from working on two phases. Vest. elektroprom. 30 no.2:17-19 F '59. (MIRA 12:3)
(Electric motors, Induction)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L. L., Cand Tech Sci -- (diss) "Closed systems of impulse control of the rotary speed of asynchronous electric motors." Moscow, 1960. 15 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 250 copies; price not given; (KL, 21-60, 125)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzh.

Regulating the rotating speed of a reducing electric drive. Vest. elektroprom. 31 no.3:50-53 Mr '60. (MIRA 13:6)
(Electric driving)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L.; LIBERMAN, I.G.; RIVILIS, A.A.

Using the mathematical statistics method for determining the dynamic characteristics of a bakery oven. Izv.vys.ucheb.zav.; pishch.tekh. no.1:114-121 '63. (MIRA 16:3)

1. Ukrainskiy proyektno-konstruktorskiy institut pishchevoy promyshlennosti, laboratoriya dinamiki.
(Ovens) (Mathematical statistics)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, Leonid L'vovich, inzh.

Regulation of the angular velocity of multiple-speed electric motors with differential transmissions. Izv.vys.ucheb.zav.; elektromekh. 4 no.8:72-80 '61. (MIRA 14:8)

1. Elektrolaboratoriya Odesskoy teploelektrotsentrali.
(Electric motors) (Electric driving)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

8 (2)

AUTHOR: Rotkop, ~~L. L.,~~ Engineer (Odessa) SOV/105-59-8-11/28

TITLE: Shocks in Pulse-regulation Mechanisms for Motor-speed Control

PERIODICAL: Elektrichestvo, 1959, Nr 8, pp 52 - 53 (USSR)

ABSTRACT: In pulsed speed-control systems, the magnitude and the sign of the acceleration of the drive varies somewhat periodically, whereas the torque at the driving shaft in some systems only varies, and in other systems varies and reverses. Thus, the possibility of shock production is given, accurate investigations showed, however, that such shocks appear only when the ratio between the motor constants and the constants of the mechanical drive falls within certain limits, which is only rarely the case with industrial drives. In pulsed speed-control systems, the period of natural oscillations of the motor speed about the mean value is composed of two sections: the acceleration to rated speed and the deceleration of the drive. A shock can occur only when during the deceleration of the drive the absolute magnitude of motor acceleration exceeds that of the drive mechanism (Ref 1). The acceleration of the motor and mechanism can be investigated separately as immediately before the shock

Card 1/3

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the motor and the mechanism are, so to speak, not coupled, owing to the clearance between the individual elements of the gearing. The conditions permitting a shock are characterized by inequality (1) (Ref 1). A shock is possible during deceleration if the constants of the drive satisfy inequality (1). If a shock is produced during the deceleration period of the drive, a shock is also produced during the period of acceleration to rated speed. This is inversely true for the case in which no shock is produced in the first period. In most industrial drives which are connected through a gear reduction with the motor, the moment of inertia of the drive referred to the motor shaft is smaller than the moment of inertia of the motor itself. Hence, inequality (1) is not satisfied, and no shocks occur in pulsed speed control. In step-up gearings, however, shocks may occur because the moment of inertia referred to the motor shaft is comparatively large. The circuit diagram of a pulsed speed control with a speed feedback (relay system of speed control) is investigated. Formula (2) governing acceleration to the rated speed and (3) for the deceleration are written down. (4) and (5) describe the motor and drive motion during acceleration and deceleration, respectively.

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Shocks in Pulse-regulation Mechanisms for Motor-speed Control SOV/105-59-8-11/28

The method presented in reference 2 permits plotting of the speed curves for the motor and the switching mechanism of the drive from formulas (2) to (5) in cases in which shocks occur in the gearing (Fig 2). The oscillograms obtained are shown by figure 3. They show that the curves given by figure 2 reproduce with sufficient accuracy the variation of the speed of the drive elements in pulsed speed control during the occurrence of shocks in the gearing. There are 3 figures and 2 Soviet references.

SUBMITTED: April 6, 1959

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzh.

Impulse method for controlling the speed of an asynchronous motor using contactless control apparatus. Vest. elektroprom. 29 no.1: 5-8 Ja '58. (MIRA 11:1)

1. Odesskaya teploelektrotsentral'.
(Electric motors, Induction)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

SOV/110-59-2-5/21

AUTHORS: Rotkop, L.L. and Rozenfel'd, A.I., Engineers

TITLE: A Filter Method of Protecting Induction Motors Against Operating on Two Phases (Fil'trovaya zashchita asinkhronnykh dvigateley ot raboty na dvukh fazakh)

PERIODICAL: Vestnik Elektropromyshlennosti,1959,Nr 2,pp 17-19 (USSR)

ABSTRACT: If one of the phases of the power supply to a three-phase induction motor fails the motor is likely to be damaged and existing methods of protecting against such faults have various disadvantages. The authors have developed a method of protecting induction motors from faults of this kind which is based on the fact that when one phase fails a negative phase sequence voltage appears on the motor terminals and can be used to operate a relay and shut down the motor. A simple schematic circuit diagram is given in Fig 1; a resistance-capacitance filter is used to detect the negative phase sequence voltage. The method of designing the filter is then explained with reference to the equivalent circuit diagram of an induction motor operating on two phases only given in Fig 2. Formula (7) is derived for the negative phase sequence voltage, which is found to be of the order of 17 - 30 V for different

Card 1/2

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SOV/110-59-2-5/21

A Filter Method of Protecting Induction Motors against Operating on Two Phases

kinds of motors. However, it has been found in practice that for most motors the negative phase sequence voltage is of the order of 25 - 45 V. Formulae are then given for the design of the filters. This method of protection has been found to work well in service. The method of protection is particularly recommended for large motors working unattended and in other cases where it is specially important that the motors should not fail. There are 2 figures and 4 Soviet references.

Card 2/2

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

8(5)

AUTHOR: Rotkop, L. L., Engineer SOV/119-59-5-4/22

TITLE: A Phase-sensitive Vibration Amplifier (Vibratsionnyy fazochuvstvitel'nyy usilitel')

PERIODICAL: Priborostroyeniye, 1959, Nr 5, pp 8-9 (USSR)

ABSTRACT: The present paper reports on the most important properties of a phase-sensitive amplifier built on the basis of a mechanical (vibration) rectifier. Two of the possible wirings of such an amplifier are shown in a figure. The following can be demonstrated: If an alternating voltage is set to the contacts of the polarized relay, and a control voltage of the same frequency to the winding of the relay, a current will flow in the charging circuit, the constant component of which depends on the intensity and phase of the control current in the winding of the polarized relay. A formula for the average value of the voltage in the charging circuit is indicated and explained. After an integration, the formula $U_{average} = \frac{U_{max}}{\pi}[\cos\alpha + \cos(\alpha + \Delta\alpha)]$, is obtained for this average value $U_{average}$, $\Delta\alpha$ being equal to $(\Delta t/T)2\pi$ and $\alpha = (t_1/T)2\pi$. t_1 and t_2 are the points of time

Card 1/3

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corresponding to the beginning of the switching on and off of the relay, Δt = the duration of voltage application to the relay, T = = period of the alternating current. At a certain relay, the duration of voltage application is nearly invariable, and consequently the constant component of the voltage in the charging circuit depends on the interruption angle α. After further computing operations, the formula $U_{average} = (U_{max}/\pi)\left[\cos(A+\varphi) + \cos(A+\varphi+\Delta\alpha)\right]$ is found, A being equal to arcsin $(I_{pm}/I_{y\,max})$. I_{pm} is the current intensity required for a reaction of the relay, and I_y is the intensity of the control current. φ is the phase shifting between the voltage U and the current intensity I_y. The value of the angle φ, for which $U_{average}$ attains extreme values, is easily obtained from the last-mentioned expression for $U_{average}$. Thus, the charging current in the windings of the phase-sensitive vibration amplifiers can be controlled either by a change in the amplitude of the control current alone (amplitude control) or by a change in the angle φ of the phase shifting (phase control), or also by a simultaneous change in the amplitude and phase of the control current (amplitude-phase

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control). Two diagrams show the experimental characteristics of the phase-sensitive amplifier built on the basis of the polarized relay RP-7. With the phase-sensitive vibration amplifier described here, all necessary characteristics of the phase-sensitive amplifier can be determined in a sufficiently wide tuning range: a) $U_{average} = 0$ if there is no control current; b) the amplifier uses both semiwaves of the feeding voltage; c) the polarity of the amplified voltage is rotated by 180° as against I_y. As is known, an amplifier of the type discussed in the present paper with the use of radio tubes can only be realized by means of a rather complicated wiring. There are 3 figures and 2 Soviet references.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

8(2)

AUTHOR: Rothop, L. L., Engineer (Odessa) SOV/105-58-11-9/28

TITLE: Power Characteristics of an Induction Motor in a System With Pulsed Speed Control (Energeticheskiye pokazateli asinkhronnogo dvigatelya v sisteme impul'snogo regulirovaniya skorosti)

PERIODICAL: Elektrichestvo, 1958, Nr 11, pp 38 - 42 (USSR)

ABSTRACT: This paper gives an account of the analysis of the power characteristics of an induction motor with a pulsed speed control utilizing a speed feedback in order to obtain rigid **mechanical** characteristics. The principal circuit conditions are described (Refs 1,7). Formula (7) specifying the admissible torque load of the motor at various mean speeds $M_{max\ adm}$ is deduced. Variants of this formula holding for different types of motors are presented. The curves obtained for $n_{av} = f(M)$ and $M_{max\ adm} = f(n_{av})$ demonstrate that the formulae obtained for computing the admissible torque load with a pulsed speed control

Card 1/3

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are sufficiently accurate. If the curves plotting the admissible torque versus speed function for different types of motors (Fig 3) are compared, the following conclusions may be drawn: 1) Motors of standard design are of little use in systems with a pulsed speed control. With respect to the admissible torque over the whole control range motors with a higher rated slip, of the type AOS, totally enclosed, with a Shenfer rotor or a phase wound rotor appear to be best suited. 2) The outside dimensions and the weight of an induction motor with a squirrel-cage rotor operated by speed control at constant torque equal to about the outside dimensions and the weight of a d.c.motor. In the speed control operation of systems with a torque proportional to the speed the outside dimensions and the weight of the a.c.motor are usually less than those of the d.c.motor. 3) If the control range is sufficiently large, in case of a sufficiently wide range of control, and in case a d.c.motor-generator system is used, the outside dimensions of the equipment

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Power Characteristics of an Induction Motor in a System With Pulsed Speed Control SOV/105-58-11-9/28

for a pulsed speed control with an induction motor are always less than those of the motor-generator system. Formula (13) is written down. It provides a means of determining the efficiency of a motor operating in a pulsed control system. It can be simplified, yielding formula (15). Formulae (13) to (15) demonstrate that the efficiency of a motor operated under a pulsed control system is independent of the torque load on the shaft at given speed. Summarizingly it is stated that the formulae presented are quite sufficient for providing an informative analysis of the power characteristics of a power drive with a pulsed speed control. There are 6 figures and 7 Soviet references.

SUBMITTED: May 7, 1958

Card 3/3

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzh.

Concatenation of induction motors to improve power factor.
Prom. energ. 13 no.7:7-10 Jl '58. (MIRA 11:10)
(Electric motors, Induction)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L., inzhener.

Device for determining markings for winding leads of three-phase electric motors. Energetik 5 no.4:20-21 Ap '57. (MLRA 10:6)
(Electric motors)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

S.A.

B 66
J

INFLUENCE OF THE TYPE OF COUPLING BETWEEN AERIAL AND THE IMPUT CIRCUIT IN SUPERHETERODYNE RECIEVERS ON THE ATTENUATION OF IMAGE SIGNALS. W. Rotkiewicz. Przegl. Telekomun., 17,9-16(Jan.,1950) In Polish.

An approximate analysis is made for the cases of series condenser coupling, capacitive coupling on the earth side (of the input resonance circuit), transformer coupling and a mixed transformer and capacitive coupling. At medium wavelengths best results are obtained with transformer coupling, if the natural resonance frequency of the aerial is appreciably below signal frequency. Mixed coupling may also be advantageous.

A. Sczaniecki

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

S.A.
Sect. B

Oscillators

621.395.611.3

2268. **Resonant circuit detuning by a coupled out-of-tune circuit.** W. ROTKIEWICZ. *Przegl. Telekomun.*, No. 10, 289–300 (*Oct.*, 1951) *In Polish.*

The effect of the aerial tuned circuit on the input resonant circuit ganged with it in a radio receiver is calculated in detail. Graphs and an example are included.

A. SCZANIECKI

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

P.T.A

Mechanical & Electrical Engineering

6

621.396.645.2

313

Rotkiewicz W., B. Sc. (Eng.). **The Influence of Aerial Coupling on the Suppression of Image Interference in Superheterodyne Receivers.**

„Wpływ rodzaju sprzężenia obwodu wejściowego z anteną na tłumienie sygnałów lustrzanych w odbiornikach superheterodynowych". Przegląd Telekomunikacyjny. No 1, 1950, pp 9–16, 7 figs., 2 tabs.

An examination of the influence of the different kinds of aerial coupling on the suppression of image interference in superheterodyne receivers. Capacitive, inductive and mixed couplings are discussed. Results of calculating for medium wavelength are given in the form of a table and a graph.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKO, M.

Rotko, M. "Colloido-disersed minerals of the Septarian suite clays in the oil bearing Maykop layer of Stavropol', " Sbornik nauch. rabot studentov (Rost. n/D gos. un-t im. Molotova), Issue 1, 1949, p. 177-27---Bibliog: 20 items

SO: U-3566, 15 March, 53 (Letopis 'zhurnal 'nykh Statey, No. 14, 1949).

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

15-57-12-17178

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, pp 64-65 (USSR)

AUTHORS: Ali-Zade A. A., Rotko, M. A.

TITLE: Volcanic Ash in Southwestern Turkmenistan (Vulkanicheskiye peply Yugo-Zapadnogo Turkmenistana)

PERIODICAL: Uch. zap. Turkm. un-ta, 1956, Nr 6, pp 49-127

ABSTRACT: Volcanic ash is marked in the sedimentary formations of Turkmenistan, in the red beds and the Akchagyl, Apsheron, and Baku series. Samples of volcanic ash were examined from the following sites: the Cheleken Peninsula, Ushak, Kukurt, Monzhukly, Boya-Dag, Syrtlanli, Pereval, and Kizyl-Arvat. The lithology and mineralogy of the ash is described in detail for the different regions. An overwhelming majority of investigators have considered the source of the ash to be volcanic centers in the Caucasus, from whence

Card 1/2

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKO, M.A.

Colloidal-dispersed minerals of the Meoticheski clays of the Rostov region and their adsorptive properties. M. A. Rotko. *Sbornik Studenchesk. Nauch. Rabot Rostov.-na-Donu Univ.* 1953, No. 2, 52-6; *Referat. Zhur., Geol., Geograf.* 1954, No. 2789.—Chem. compn. of the fine fraction of the clays is: SiO_2 49.53, Al_2O_3 26.04, Fe_2O_3 8.17, CaO 0.52, $K_2O + Na_2O$ 0.04, H_2O- 7.47, H_2O+ 9.23%. Heating curves indicate it is ferribeidellite. D. J. Milton

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKO, M. A.

"Colloidal Dispersive Minerals of Meotic Clays in the Rostov Region and Their Adsorptive Properties"
Sb. Stud. Nauch. Rabot Rostovsk. -na-Donu Un-ta, 1953, No 2, 52-56

A student scientific work conducted at Rostov University. The student gives the chemical composition of the fine fraction of meotic clays from the neighborhood of Rostov, in percent: SiO_2, 49.53; Al_2O_3,26.04; Fe_2O_3,8.17; CaO,0.52; K_2O-Na_2O,0.04; hygroscopic water, 7.47; water of crystallization, 9.23. The critical point of heating is characteristic of ferribaidellite. RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, [illegible]; [illegible]BERG, Ye.M.; MANDEL'SHTEYN, M.L.

Static characteristics of the rectifying tower. Ferm. i spirt. prom. 31 no.6:13-18 '65. (MIRA 18:9)

1. Pishchepromavtomatika.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

AUTHOR: Rotkop, L. L., Engineer 94-13-7-4/25

TITLE: Cascade Connection of Induction Motors to Increase the Power Factor (Kaskad asinkhronnykh elektrodvigateley dlya povysheniya koeffitsiyenta moshchnosti)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol 13, Nr 7, pp 7-10 (USSR)

ABSTRACT: Under certain conditions the power factor of lightly loaded induction motors can be improved by using cascade connection. There must, of course, be two identical motors similarly and not too heavily loaded. Examples of this kind include motors for forced and induced draught fans and motors on two centrifugal pumps working in parallel. Cascade connection is effected by reconnecting the stator windings of the two motors from the normal star connection to the double delta circuit illustrated in Fig.1, which has the result that half line voltage is applied to each phase winding. Thus, in effect, the motor is operating at 0.865 times the rated voltage. The rotor current is greater when the applied voltage is reduced and the power factor is higher. A short circuiting switch may be used to change over from

Card 1/2

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94-13-7-4/25

Cascade Connection of Induction Motors to Increase the Power Factor

normal start to cascade connection either during operation or before starting. An equation is derived for the rotor current during cascade working and other equations are derived for the no-load current, the stator current, the power factor and the reactive power. The ratio of stator current in cascade to that in normal connection as a function of torque is given in Fig.3 for different motors. Curves showing the power factor increase are given in Fig.4 and it is shown that the power factor improvement may be 8 - 17%. This graph also gives curves of the change in reactive power as a function of torque. The use of the cascade connection is most advantageous in industrial undertakings remote from the power station.
There are 4 figures and 3 Soviet references.

Card 2/2 1. Induction motors - Performance 2. Induction motors - Properties 3. Mathematics - Applications

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, Leonid L'vovich, kand. tekhn. nauk, starshiy nauchnyy sotrudnik

Study of the dynamic processes of an asynchronous electric drive with a saturable reactor using an analog computer. Izv. vys. ucheb. zav.; elektromekh. 8 no.4:402-411 '65. (MIRA 18:5)

1. Proyektno-konstruktorskiy institut kompleksnoy avtomatizatsii proizvodstvennykh protsessov v pishchevoy promyshlennosti, Odessa.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROZENFEL'D, A.S., inzh.; ROTKOP, L.L., inzh.

Device for finding grounded lines. Elek.sta. 29 no.8:84-85 Ag '58. (MIRA 11:11)

(Electric lines--Testing)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOP, L.L. (Odessa)

Methods for studying relay-type statistical automata in the presence of stochastic disturbances. Izv. AN SSSR. Tekh. kib. no.4:107-114 Jl-Ag '63. (MIRA 16:11)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

AUTHOR: Rotkop, L.L., Engineer 110-1-2/19

TITLE: The Impulse Method of Controlling the Speed of an Induction Motor Using Contactless Control Apparatus (Impul'snyy metod regulirovaniya skorosti asinkhronnogo dvigatelya s primeneniyem beskontaktnoy apparatury upravleniya)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Vol.29, No.1, pp. 5 - 8 (USSR)

ABSTRACT: The impulsive, or "on-off", method of controlling the speed of electric motors was developed by Academician V.S. Kulebakin. This article describes an investigation of its application to a three-phase squirrel-cage motor, using contactless control apparatus with negative feed-back from the speed to obtain rigid mechanical characteristics. A circuit of the drive is given in Fig.1 and the characteristics of the magnetic relay in Fig.1b. As the motor reaches a certain speed, the current in the control circuit operates the magnetic relay, which alters the power of the magnetic amplifier (saturable reactor) to reduce the stator voltage. As the speed of the machine falls, the current in the control circuit falls, until the relay returns to the initial position and the speed begins to rise again. Thus, the machine speed fluctuates about a mean value, which is determined by a potentiometer setting. A

Card1/4

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110-1-2/19

The Impulse Method of Controlling the Speed of an Induction Motor Using Contactless Control Apparatus

high-slip motor may be used if a wide range of speed control is required. A speed control oscillogram for a machine with the circuit of Fig.1 is given in Fig.2.
The design of the mechanical characteristics of the electrical drive is then given. It is assumed that there is no delay in the elements of the control circuit and no electrical transient processes in the motor. An approximate exponential function is given for the natural mechanical characteristic with maximum auxiliary magnetisation. Expressions for the times of acceleration and deceleration and finally an expression for the mean speed are derived. Under actual experimental conditions, speed fluctuations in the drive are ± 5 - 15%; these can be much reduced by correcting circuits or other devices. The mechanical characteristics of a 3 kW 750 r.p.m. motor with a massive rotor are given in Fig.3. It is fairly simple to obtain a speed control range of 60 : 1 and it is possible to increase this to 150 : 1 and higher. The power characteristics of the drive are then considered. On fig.3, the load, as limited by heating, is shown by the curve ab , constructed from experimental data. Experimental graphs of power-factor and efficiency of a drive

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110-1-2/19

The Impulse Method of Controlling the Speed of an Induction Motor Using Contactless Control Apparatus

with an electric motor of 0.6 kW and 1 500 r.p.m. with a massive rotor are given in Fig.4. Over the whole range, the power-factor is from 0.5 - 0.8 times that of a normal motor. The drive is stable under transient conditions whatever the rate of change of load torque.

The "on-off" method of speed control has the advantages that the control apparatus is small, the speed range is large and the transient process is of minimum duration. Ordinary "on-off" equipment has the disadvantages of rapid wear and unreliability due to the behaviour of contacts. This is overcome by the use of magnetic amplifiers and relays. Methods of reducing the amplitude of speed fluctuations are described.

An experimental motor with an output of 3 kW at 750 r.p.m. was used to drive the coal feeder on a direct-flow boiler set in a power station. It replaced a d.c. motor and motor-generator set with a speed range of 6 : 1. Fig. 3 incorporates the mechanical characteristics of the new drive, which has been in use for more than a year. The saturable reactor is about half the weight of the motor and the magnetic amplifier is about the same size as an 80 VA transformer.

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110-1-2/19

The Impulse Method of Controlling the Speed of an Induction Motor Using Contactless Control Apparatus

Instead of employing a tacho-generator to provide the feed-back signal, it is possible to use other devices which give a signal proportional to the speed. This can be done by combining two feed-backs, positive in respect of motor current and negative in respect of voltage. The circuit is given in Fig.5A. Use may also be made of a negative feed-back bridge circuit shown in Fig.5B.
There are 5 figures and 4 Russian references.

ASSOCIATION: Odessa Heat and Electric Power Station (Odesskaya TETs)

SUBMITTED: November 19, 1956

AVAILABLE: Library of Congress

Card 4/4

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

RUMANIA/Chemical Technology. Chemical Products and Their Uses. Part IV. Synthetic Polymers. Plastics. H

Abs Jour : Ref Zhur-Khimiya, No 15, 1958, 52092

Author : Goldenberg N., Rotkopf, L.
Inst : -
Title : New Type of Laboratory Press for the Study of Plastics.

Orig Pub : Rev. chim., 1957, 8, No 11, 718-720

Abstract : A universal laboratory press for molding, vacuum forming, pressure casting, die casting, continuous stamping, sandwich molding for laminate production, punching, and hot and cold stamping of plastics was described. The press, built in RPR (Ruma-

Card : 1/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

BOTKOV, I.I., kand. med. nauk.

Seven operations for heart wounds. Khirurgiia, Moskva 34 no.11:130 N '58. (MIRA 12:1)

1. Iz kafedry gospital'noy khirurgii Gor'kovskogo meditsinskogo instituta (zav. - prof. B.A. Korolev).
(HEART--SURGERY)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOV, I.L.

Ligation of the right pulmonary artery in pneumonectomy medial to the superior vena cava. Khirurgiia 35 no.9:107-108 '59. (MIRA 13:12)

(LUNGS--SURGERY) (PULMONARY ARTERY--LIGATION)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

BOTKOV, I.L., dotsent (Gor'kiy, 6, Kovalikhinskaya ul., 28-a,kv.19)

Modified gastric resection with enteroplasty by K.I. Zakharov's method. Vest. khir. 92 no.2:115-117 F '64. (MIRA 17:9)

1. Iz kafedry obshchey khirurgii (zav.- prof. A.I. Kozhevnikov) Gor'kovskogo meditsinskogo instituta (rektor - dotsent I.F. Matyushin).

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOV, I.L., [illegible]

Resection of the stomach and plastic surgery using the ant peristaltic portion of the small intestine (immediate results). Khirurgiia 40 no.9:9-13 S '64 (MIRA 18:2)

1. Kafedra obshchey khirurgii (zav. - prof. A.I. Kozhevnikov) Gorkovskogo meditsinskogo instituta i Gospital' sovetsko v'yetnamskoy druzhby (direktor - Ni Te Bao, zav. khirurgicheskim otdeleniyem Khuang-Fung), Khanoy.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOV, I.L., dotsent

Lingual goiter. Kaz.med.zhur. 40 no.6:95-96 N-D '59.
(MIRA 13:5)

1. Iz kafedry obshchey khirurgii (zav. - prof. A.I. Kozhevnikov) Gor'kovskogo meditsinskogo instituta.
(TONGUE--DISEASES) (GOITER)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOV, I.L. (Gor'kiy)

Gastroscopy under a tetraciane-hexenal anesthesia. Klin.med. 35 [i.e.34] no.1 Supplement:50-51 Ja '57. (MIRA 11:2)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. B.A.Korolev) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova (dir. - dotsent N.N.Mizinov)
(GASTROSCOPY) (ANESTHESIA)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

936 **Processing of Titaniferous Magnetites Based on Reduction of Ores With a Gaseous Reducing Agent at Moderate Temperatures.** E. V. Snopova and N. I. Rotkov. *Henry Brutcher, Altadena, Calif., Translation no.* [redacted] From *Trudy Uralgeomin (Uralsk. Nauch-Issled. Instituta Geologii, Razvedoki Issledovaniya Mineral'nogo Syr'ya)*, 1938, no. 3, p. 285-293.)

Production of sponge iron; melting in H.F. furnaces, and extraction of Ti and V from the slag by chemical methods. Direct production of Fe from ilmenite by action of H and CO at moderate temperatures. Tables. 2 ref.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOV, N. I.
V. S. SUIROKOMSKI, Min. Suir, 1931, 6, 522-527

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Reduction of ilmenite and titanium dioxide at moderate temperatures in a current of hydrogen and carbon monoxide. E. V. Snopova and N. I. Rotkov. *Sovet. Met.* 1936, No. 12, 11-20; *Chem. Zentr.* 1937, II, 2072.—Reduction of TiO_2 with H_2 or CO in the temp. range 700-1100° results in the formation of Ti_2O_3. The degree of reduction increases with increasing temp.; the reduction velocity is 2-3 times as great when H_2 is used as with CO. With H_2 at 1100° complete conversion into Ti_2O_3 is obtained within 2 hrs. In the reduction of an ilmenite contg. 9.20% hematite and 1.8% rutile by H_2 at 700°, over 40% of the Fe_2O_3 content was reduced to metallic Fe in 3.5 hrs.; at 1100° all the Fe_2O_3 was reduced within 1 hr. When CO was the reducing agent, 16% of the Fe_2O_3 was reduced in 1 hr. at 800° and over 60% in 5 hrs. At 900° over 90% was reduced in 5 hrs.; at 1000° practically 100% was reduced in 3 hrs. While with H_2, even at 1000°, appreciable reduction of the TiO_2 in ilmenite occurs, with CO reduction first takes place at 1100°. In the reduction of ilmenite with CO a sepn. of C takes place, which is greater the lower the temp. and the longer the period of reduction. Deposition of C is less in the reduction of TiO_2. The reduction of titanomagnetite with CO takes place more rapidly than that of ilmenite. At 800° about 50% of the Fe oxide was reduced to metal in 4 hrs.; with increasing temp. and period of reduction the amt. reduced increases. M. G. M.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

Treatment of Kusin titanomagnetites based on the reduction of the ore with gaseous reducing agents at moderate temperatures. B. V. Snopova and N. I. Rotkov. *Trudy Ural. Nauch.-Issledovatel. Inst. Geol. Razved. i Issled. Min. Syr'ya* 1938, No. 3, 285-93; *Khim. Referat. Zhur.* 1, No. 11-12, 99-100(1938). The finely divided ore (0.5 mesh) was reduced at 900-1000°. More than 95% of the Fe oxides were changed into spongy metallic Fe, while Ti and V remained in the form of oxides. A complete reduction of the Fe oxides between 700 and 1100° is possible. The fusion of the spongy Fe at about 1500° produces a metallic Fe contg. not more than 0.01% of S, and a slag which contains almost all the Ti and V contained in the ore. By roasting the slag at about 900° for 3-4 hrs., by adding 10 parts by wt. of salt and the same amt. of soda, and by leaching it with water, 85% of the V is dissolved and the Ti left unchanged. V is then obtained from the soln. in the form of V_2O_5 (90-5%), and the remainder pptd. with lime in the form of Ca vanadate. After the extn. of V the residue is treated for 1 hrs. at 250° with H_2SO_4 to obtain TiO_2. W. R. Henn

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

LANDSBERG, G.S., akad. [deceased]; MAYANTS, L.S., doktor fiziko-matem. nauk; BATUYEV, M.I., doktor khim. nauk; BARYSHANSKAYA, F.S., kand. fiziko-matem. nauk; STERIN, Kh.Ye., kand. fiziko-matem. nauk; ARANOVICH, P.M., kand. khim. nauk; BYALOVA, V.V., mlad. nauchnyy sotr.; ROTKOVA, S.V., mlad. nauchnyy sotr.; RABINOVICH, N.Ya., mlad. nauchnyy sotr.; BERKGAUT, V.G., red. izd-va; GOLUB', S.P., tekhn. red.

[Scattering of light and infrared spectroscopy; bibliographic index for 1928-1940] Rasseianie sveta i infrakrasnaia spektroskopiia; bibliograficheskii ukazatel' 1928-1940. Moskva, Izd-vo Akad. nauk SSSR, 1961. 451 p. (MIRA 14:11)

1. Akademiya nauk SSSR. Komissiya po spektroskopii. Sektor seti spetsial'nykh bibliotek.
(Light--Scattering--Bibliography) (Spectrum, Infrared--Bibliography)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOVA, S.V., starshiy bibliograf; METSATUN'YAN, I.A., bibliograf; TANANAYEV, I.V., akademik, otv.red.; TRONEV, V.G., doktor khim. nauk, nauchnyy red.; SPIVAKOVA, E.M., red.; PEREL'MAN, F.M., doktor khim.nauk, nauchnyy red.; SPERANSKAYA, Ye.I., kand.khim. nauk, nauchnyy red.; DEYCHMAN, E.N., kand.khim.nauk, nauchnyy red.; BASHILOVA, N.I., mladshiy nauchn.sotrudnik, nauchnyy red.; BOL'SHAKOVA, N.K., mladshiy nauchn.sotrudnik, nauchnyy red.; KASHINA, R.S., tekhn.red.

[Chemistry of rare elements; bibliographic index of Soviet and foreign literature] Khimiia redkikh elementov; bibliograficheskii ukazatel' otechestvennoi i zarubezhnoi literatury. Moskva, Izd-vo Akad.nauk SSSR. No.1. (1951-1954). 1960. 418 p. (MIRA 13:11)

1. Biblioteka Otdeleniya khimicheskikh nauk AN SSSR (for Rotkova).
2. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova (for Tronev, Perel'man, Speranskaya, Deychman, Bashilova, Bol'shakova).
(Bibliography--Metals, Rare and minor)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKOVICH, G.Ya.

Embedding a semiordered space into a space with unity. Sib. mat. zhur. 6 no.4:918-923 Jl-Ag '65. (MIRA 18:10)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

L 13546-66

ACC NR: AP6005994 SOURCE CODE: CZ/0053/65/014/004/0270/0270

AUTHOR: Vacek, A.; Davidova, E.; Rotkovska, D.

ORG: Biophysical Institute CSAV, Brno (Biofysikalni ustav CSAV)

37
B

TITLE: Concentration of dissolved oxygen in tissues and factors affecting it [This paper was presented at the Conference on Electrochemical Measurement of Oxygen in Biological Materials, Brno, 22 October 1964.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 270

TOPIC TAGS: drug effect, hemoglobin, oxygen, animal physiology

ABSTRACT: The level of physically dissolved O_2 released from oxyhemoglobin into interstitial tissue fluid and as yet not taken up by cells is very susceptible to various changes of internal environment; epinephrine, anesthesia, decreased oxygen concentration in inspired air all lower it. The level rapidly stabilizes in a direct ratio to the level in inspired air. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 HW

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

L 13544-66 EWT(m) DIAAP

ACC NR: AP6005996 SOURCE CODE: CZ/0053/65/014/004/0271/0271

AUTHOR: Rotkovska, D.; Vacek, A.

ORG: Biophysics Institute CSAV, Brno (Biofysikalni ustav CSAV)

37 B

TITLE: O sub 2 requirement and O sub 2 tension following DNP administration and irradiation [This paper was presented at the Conference on Electrochemical Measurement of Oxygen in Biological Materials, Brno, 22 October 1964.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 271

TOPIC TAGS: oxygen, radiation biologic effect, rat, liver, myology, radiation sickness, phosphorylation, oxidation, phthalic acid

ABSTRACT: Studies of muscle, liver and spleen of irradiated rats to 1000 r and given 30 mg /Kg i.p. of 2,4-DNP The ratio between increase in oxygen requirements and decreasing tension in tissues was changed during the acute stage of radiation sickness; there was noted a probable disruption of oxidative phosphorylation during the terminal stages of same. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 HW

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTKYTE, Lilija; GRICIUVIENE, S., red.; LUKOSEVICIUS, St., tekhn. red.

[Rare metals]Retieji metalai. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1962. 81 p. (MIRA 15:10)
(Metals, Rare and minor)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

GINZBURG, V.L.; ROTLEDER, V.M.

Review of foreign patents of type "RS" tires. Kauch.i rez. 22 no.2:36-38 F '63. (MIRA 16:2)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Tires, Rubber--Patents)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

BUZYREV, V.M., prof.[deceased]; LABAZOV, V.I., dots.; NIKOLOTOV, S.N., dots.; SKVORTSOV, L.I., dots.; MITEL'MAN, Ye.L., dots.; SHTEYNSHLEYGER, S.B., dots.; BELKIN, S.A., prepod.; ROTLEYDER, A.Ya., dots.; USHAKOVA, L.N., prepod.; DUBNOVA, Z.K., red.

[Currency circulation and credit in the U.S.S.R.] Denezhnoe obrashchenie i kredit SSSR. Moskva, Vysshaia shkola, 1965. 458 p. (MIRA 18:8)

1. Vsesoyuznyy zaochnyy finansovo-ekonomicheskiy institut (for all except Dubnova).

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

IKONNIKOV, V.V., prof.; VASIL'YEV, P.G., ,and, ekon.nauk; LAVROV, V.V., prof.; RYUMIN, S.M.; KOLYCHEV, L.I., kand. ekon. nauk; SAMOYLOV, V.K.; LYSKOVICH, A.A.; KOLOMIN, Ye.V., kand. ekon. nauk; MITEL'MAN, Ye.L., kand. ekon. nauk; BEL'KINA, R.K., kand. ekon. nauk; SHTEYNSHLEYGER, S.B., kand. ekon. nauk; ROTLEYDER, A.Ya., kand. ekon. nauk; POGODIN, Yu., red.; TELEGINA, T., tekhn. red.

[Finance and credit in the U.S.S.R.] Finansy i kredit SSSR. Moskva, Izd-vo "Finansy," 1964. 447 p. (MIRA 17:3)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

VANINA, V.I.; GUTMAN, A.M.; ZAKOSHCHIKOV, A.P.; ZAKOSHCHIKOV, S.A.; ROTLEYDER, V.M.

Adsorption properties of hydrolytic lignin. Koll.zhur. 22 no.1: 9-15 Ja-F '60. (MIRA 13:6)

1. Vysshaya shkola promyslovoy kooperatsii st. Cherkizovo, Moskovskoy oblasti.

(Lignin) (Adsorption)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

VANINA, V.I.; GUTMAN, A.M.; ZAKOSHCHIKOV, A.P.; ZAKOSHCHIKOV, S.A.; ROTLEYDER, V.M.

Hydrolytic lignin used as an active filler for polyvinyl chloride resin and microporous rubbers. Gidroliz i lesokhim. prom. 12 no.5: 8-9 '59. (MIRA 12:10)

(Lignin)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTMAN, Aurel, ing.

The 400 kv. system of the USSR. Energetica Rum 7 no.11:468-482 N '59.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

SOV/20-120-5-19/67

AUTHOR: Rotman, G.

TITLE: A Method of Determining the Mean Kinetic Energy of Electrons in a Druyvesteyn-Davydov-Distribution (Metod opredeleniya sredney kineticheskoy energii elektronov v sluchaye raspredeleniya Drayvesteyna-Davydova)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 5, pp. 999 - 1002 (USSR)

ABSTRACT: The computations discussed permit to determine whether a Druyvesteyn-Davydov velocity distribution exists in a plasma. It further permits to find out whether it will be possible to determine the mean kinetic energy V_m of the electrons, the potential V_i of the plasma and the number of charge carriers per 1 cm^3. First a formula for the current entering a plane or spherical probe is given. This current intensity is then computed for the case of a Druyvesteyn-Dravydov-distribution. In this method from 2 to 4 approximations are necessary, their number depending upon the experimental results. A diagram illustrates as an example a semi-logarithmic probe characteristic for the positive column in neon. The function shows a linear

Card 1/3

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

SOV/20-120-5-19/67

A Method of Determining the Mean Kinetic Energy of Electrons in a Druyvesteyn-Davydov-Distribution

course within experimental errors. According to this method the most probable value of the electron energy is $V_p = 6,7$ eV. This result is compared with the mean kinetic energy of the electrons, which under the conditions assumed results from the theory of Schottky (Shottki). A very good agreement is found, if the Dru/ves_teyn-Davydov-distribution is used, whereas a Maxwell distribution gives no agreement, which fact favors the method of evaluating the semi-logarithmic characteristic. The author thanks for the interest shown by R. Grigorovich and expresses his gratitude for a fertile discussion. There are 2 figures and 10 references, 2 of which are Soviet.

ASSOCIATION: Fiziko-matematicheskiy fakultet Bukharestskogo universiteta Bukharest, Rumyniya (Department of Physics and Mathematics of Bucharest University, Bucharest, Roumania)

PRESENTED: March 5, 1958, by L. A. Artsimovich, Member, Academy of Sciences, USSR

Card 2/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

SOV/20-120-5-19/67

A Method of Determining the Mean Kinetic Energy of Electrons in a Druyvesteyn-Davydov-Distribution

SUBMITTED: November 16, 1957

1. Electrons--Energy 2. Electron gas--Properties
3. Mathematics

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001445510004-7

ROTMAN, G.

Method for determining the mean kinetic energy of electrons in the case of Druyvesteyn-Davidov distribution. Dokl. AN SSSR 120 no. 5:999-1002 Je '58. (MIRA 11:8)

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Increasing the economy of piston compressor operation [in Azerbaijani with summary in Russian]. Azerb. neft. khoz. 36 no.12:42-43 D '57. (MIRA 11:3)
(Compressors)

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CZECHOSLOVAKIA

J. JEDLICKA and P. NESVADBA, Cardiology Laboratory of Second Internal Medicine Clinic of Faculty of General Medicine of Charles University (Kardiologicka laborator pri II interni klinice fakulty vseobecneho lekarstvi KU [Karlove University]) Head (prednosta) prof Dr Fr. HERLES, DrSc; and Polyclinic of the Okres Institute of National Health (Poliklinika OUNZ [Okresni ustav narodniho zdravi],) Chief (reditel) J. ROTMAN, MD, Prague.

"Clinical Diagnosis of Ebstein's Anomaly."

Prague, Casopis Lekaru Ceskych, Vol 102, No 8, 22 Feb 63; pp 209-213.

Abstract [English summary modified]: Detailed description of case of woman of 41, studied by authors for 15 years; cyanosis rather than dyspnea was main symptom; she had been cyanotic from birth. Despite 2 normal births and mild tendency to obesity, she was well compensated and essentially well. Comprehensive cardiologic work-up with discussion of differential diagnosis with tetralogy of Fallot and other congenital cardiac malformations. Nine graphs, 3 rontgenograms, 1 Soviet, 1 Czech and 45 Western references.

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