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BESSONOV, A.P

PHASE I BOOK EXPLOITATION SOV/4530

Vsesoyuznoye soveshchaniye po osnovnym problemam teorii mashin i mekhanizmov. 2d, Moscow, 1958

Dinamika mashin; sbornik statey (Dynamics of Machines; Collection of Articles) Moscow, Mashgiz, 1960. 240 p. (Its: Trudy) Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Institut mashinovedeniya Akademii nauk SSSR.

Editorial Board: I. I. Artobolevskiy (Resp. Ed.) Academician, S. I. Artobolevskiy, Doctor of Technical Sciences, Professor, G. G. Baranov, Doctor of Technical Sciences, Professor, A. P. Bessonov, Candidate of Technical Sciences, V. A. Gavrilenko, Doctor of Technical Sciences, Professor, A. Ye. Kobrinskiy, Doctor of Technical Sciences, N. I. Levitskiy, Doctor of Technical Sciences, Professor, and L. N. Reshetov, Doctor of Technical Sciences, Professor;

Ed.: L. V. Bezmenova, Candidate of Technical Sciences; Managing Ed. for General Technical Literature and Literature on Transport Machine Building (Mashgiz):

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A. P. Kozlov, Engineer; Tech. Ed.: B. I. Model'.

PURPOSE: This collection of articles is intended for engineers, designers, workers at scientific research institutes, and instructors at schools of higher technical education.

COVERAGE: This collection consists of reports presented at the All-Union Conference on Problems in the Theory of Machines and Mechanisms held in Moscow in 1958. The reports discuss several problems of the dynamic design of complex mechanical systems. No personalities are mentioned. References accompany most of the articles.

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Bessonov, A. P., and A. V. Shlyakhtin, Candidates of Technical Sciences. Some Problems in the Dynamics of Machines of Vibratory Action 5

Blekhman, I. I., Candidate of Physics and Mathematics. Theory of Self-Synchronization of Mechanical Vibrators

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RAYEVSKIY, Nikolay Petrovich, kand.tekhn.nauk; ARTOBOLEVSKIY, I.I., akademik, otv.red.; BLAGONRAVOV, A.A., akademik, red.; BRUYEVICH, N.G., akademik, red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn. nauk, red.; BELYANIN, P.N., red.izd-va; ASTAF'YEVA, G.A., tekhn. red.

[Indicators of mechanical parameters of machines] Datchiki mekhanicheskikh parametrov mashin. Moskva, Izd-vo Akad.nauk SSSR, 1959. 186 p. (MIRA 13:1)

1. AN USSR (for Sérensen).
(Measuring instruments) (Machinery--Testing)

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DIMENTBERG, Fedor Menas'yevich, doktor tekhn.nauk; SERENSEN, S.V., akademik, otv.red.; ARTOBOLEVSKIY, I.I., akademik,otv.red.; BLAGONRAVOV, A.A., akademik; red.; BRUYEVICH, N.G., akademik; red.; DIKUSHIN, V.I., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; RAYEVSKIY, N.P., kand.tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; MELEYEV, A.S., red.izd-va; KUZ'MIN, N.K., tekhn.red.; MAKUNI, Ye.V., tekhn.red.

[Bending vibrations of revolving shafts] Izgibnye kolebaniia vrashchaiushchikhsia valov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 246 p.

1. Akademiya nauk USSR (for Serensen).
(Vibration) (Shafting)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

Bessonov, A.P.

ARTOBOLEVSKIY, Ivan Ivanovich, akademik; LEVITSKIY, N.I., prof., doktor tekhn.nauk, otv.red.; BLAGONRAVOV, A.A., akademik, red.; BRUYEVICH, N.G., akademik, red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; DIMENTBERG, F.M., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; RAYEVSKIY, N.P., kand.tekhn.nauk, red.; ~~BESSONOV, A.P.~~, kand.tekhn.nauk, red.; PERLYA, Z.N., red.izd-va [deceased]

[Theory of mechanisms for reproduction of flat curves] Teoriia mekhanizmov dlia vosproizvedeniia ploskikh krivykh. Moskva, Izd-vo Akad.nauk SSSR, 1959. 253 p. (MIRA 12:8)

1. AN USSR (for Serensen).
(Drawing instruments)

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BESSONOV, A. P.

CHERKUDINOV, Sergey Aleksandrovich; ARTOBOLEVSKIY, I.I., akademik, otv.red.; BLAGONRAVOV, A.A., akademik, otv.red.; BRUYEVICH, N.G., akademik, red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; DIMENTBERG, F.M., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; RAYEVSKIY, N.P., kand.tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; KUDASHEV, A.I., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Synthesis of flat hinged-lever mechanisms; problems on the reproduction of a continuous function on a given section] Sintez ploskikh sharnirno-rychazhnykh mekhanizmov; zadachi o vosproizvedenii nepreryvnoi funktsii na zadannom otrezke. Moskva, Izd-vo Akad.nauk SSSR, 1959. 321 p. (MIRA 13:1)

1. AN USSR (for Serensen).
(Machinery, Kinematics of)

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7(0) SOV/30-59-4-14/51

AUTHOR: Bessonov, A. P., Candidate of Technical Sciences

TITLE: News in Brief (Kratkiye soobshcheniya) Conference on Machine Dynamics (Konferentsiya po dinamike mashin)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 4, pp 101-102 (USSR)

ABSTRACT: The Conference took place in Liblice u Mělnika (60 km off Prague) from November 25th until November 27th, 1958 and had been convened by the Institute of Machine Research of the Czechoslovakian Academy of Sciences. The Conference dealt very much with the discussion of problems of applied oscillation theory. The author of the present paper reported on investigations of the dynamics of unbalanced vibrators. On a special meeting measuring methods and corresponding devices were discussed. Another discussion was devoted to problems of the organization of further research work.

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SPERANSKIY, Nikolay Vasil'yevich; ARTOBOLEVSKIY, I.I., akademik, otv. red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; LEVITSKIY, A.I., prof., doktor tekhn.nauk, red.; DIMENTBERG, F.M., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; RAYEVSKIY, N.P., kand.tekhn.nauk, red.; BESSONOV, A.P., kand. tekhn.nauk, red.; SOKOLOVA-CHESTNOVA, V.A., red.izd-va; SUSHKOVA, L.A., tekhn.red.

[Designing Geneva wheels] Proektirovanie mal'tiiskikh mekhanizmov. Moskva, Izd-vo Akad.nauk SSSR, 1960. 92 p. (MIRA 13:8)

1. AN USSR (for Serensen).
(Mechanical movements)

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ARTOBOLEVSKIY, I.I., akademik, otv.red.; BYSTRITSKAYA, V.V., inzh., red.; ARTOBOLEVSKIY, S.I., prof., doktor tekhn.nauk, red.; BARANOV, G.G., prof., doktor tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn. nauk, red.; GAVRILENKO, V.A., prof., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; RESHETOV, L.N., prof., doktor tekhn.nauk, red.; MODEL', B.I., tekhn.red.

[Theory of transmissions in machinery] Teoriia peredach v mashinakh; sbornik statei. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1960. 172 p. (MIRA 13:12)

1. Vsesoyuznoye soveshchaniye po osnovnym problemam teorii mashin i mekhanizmov. 2d.
(Machinery) (Power transmission)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

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ARTOBOLEVSKIY, I.I., akademik, otv.red.; ARTOBOLEVSKIY, S.I., prof., doktor tekhn.nauk, red.; BARANOV, G.G., prof., doktor tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; GAVRILENKO, V.A., prof., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; RESHETOV, L.N., prof., doktor tekhn.nauk, red.; BYSTRITSKAYA, V.V., inzh., red.; MODEL', B.I., tekhn.red.

[The theory of automatic machines and the theory of pricision in the manufacture of machinery and instruments] Teoriia mashin avtomaticheskogo deistviia i teoriia tochnosti v mashinostroenii i priborostroenii; sbornik statei. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 218 p. (MIRA 13:7)

1. Vsesoyuznoye soveshchaniye po osnovnym problemam teorii mashin i mekhanizmov. 2d, Moscow, 1958.
(Machinery, Automatic) (Machinery industry)
(Instrument manufacture)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

ARTOBOLEVSKIY, I.I., akademik, otv.red.; ARTOBOLEVSKIY, S.I., prof., doktor tekhn.nauk, red.; BARANOV, G.G., prof., doktor tekhn. nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; GAVRILENKO, V.A., prof., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; RESHETOV, L.N., prof., doktor tekhn.nauk, red.; BEZMENOVA, L.V., kand.tekhn.nauk, red.; MODEL', B.I., tekhn.red.

[Dynamics of machinery] Dinamika mashin; sbornik statei. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 238 p. (MIRA 13:8)

1. Vsesoyuznoye soveshchaniye po osnovnym problemam teorii mashin i mekhanizmov. 2n, Moscow, 1958.
(Machinery) (Mechanical movements)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

GERTS, Yelena Vasil'yevna; KREYNIN, German Vladimirovich; ARTOBOLEVSKIY, I.I., akademik, otv.red.; BLAGONRAVOV, A.A., akademik, red.; BRUYEVICH, N.G., akademik, red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., doktor tekhn.nauk, red.; LEVITSKIY, N.I., prof., doktor tekhn.nauk, red.; DIMENTBERG, F.M., doktor tekhn.nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; RAYEVSKIY, P.P., kand.tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; GORSHKOV, G.B., red.izd-va; MAKOGONOVA, I.A., tekhn.red.

[Theory and design of pneumatic power devices] Teoriia i raschet silovykh pnevmaticheskikh ustroistv. Moskva, Izd-vo Akad.nauk SSSR, 1960. 177 p. (MIRA 14:2)

1. AN USSR (for Serensen).
(Pneumatic machinery)

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BESSONOV, A.P.

Study of dynamics of vibrators with rotating weight. Acta tech Cz 5 no.6:516-525 '60. (EEAI 10:4)

1. Institut mashinovedeniya AN SSSR, Moskva.
(Vibration)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

GROBOV, Valerian Aleksandrovich; ARTOBOLEVSKIY, I.I., akademik, otv. red.; DIKUSHIN, V.I., akademik; red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., doktor tekhn. nauk, prof., red.; LEVITSKIY, A.I., doktor tekhn. nauk, prof., red.; DIMENTBERG, F.M., doktor tekhn. nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; RAYEVSKIY, N.P., kand. tekhn. nauk, red.; BESSONOV, A.P., kand. tekhn. nauk, red.; ORPIK, S.L., red. izd-va; LAUT, V.G., tekhn. red.

[Asymtotic methods for calculating bending vibrations of turbomachine rotors] Asimptoticheskie metody rascheta izgibnykh kolebanii valov turbomashin. Moskva, Izd-vo Akad. nauk SSSR, 1961. 165 p. (MIRA 14:5)

1. Akademiya nauk USSR (for Serensen)
(Impellers--Vibration)

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BESSONOV, A.P., kand.tekhn.nauk

Basic problems of the theory of machinery and mechanisms. Vest. AN SSSR 31 no.10:140-141 O '61. (MIRA 14:9)
(Mechanical engineering--Congresses)

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BESSONOV, A.P., kand.tekhn.nauk

The third conference on basic problems in the theory of machinery and mechanisms. Vest.mash. 41 no.11:80-81 N '61. (MIRA 14:11)
(Mechanical engineering)

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ARTOBOLEVSKIY, I.I. (Moskva); BESSONOV, A.P. (Moskva)

Equation of the motion of a flat mechanism with a variable mass. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.2:92-95 Mr-Ap '62. (MIRA 15:5)

(Mechanical movements)

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BESSONOV, A.P.

Methods of phase-plane displacements and the investigation of the movements of machinery. Trudy Inst.mash.Sem.po teor.mash. i mekh. 23 no.89/90:125-143 '62. (MIRA 15:6)
(Mechanical movements)

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ARTOBOLEVSKIY, I.I., akademik, red.; LEVITSKIY, N.I., doktor tekhn. nauk, prof., red.; KOZHEVNIKOV, S.N., red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; PETROKAS, L.V., doktor tekhn. nauk, red.; GAVRILENKO, V.A., doktor tekhn. nauk, red.; BESSONOV, A.P., kand. tekhn. nauk, red.; GRODZENSKAYA, L.S., kand. tekhn. nauk, red.; MERENSKAYA, I.Ya., red.izd-va; UVAROVA, A.F., tekhn. red.

[Analysis and synthesis of mechanisms] Analiz i sintez mekhanizmov; sbornik statei. Moskva, Mashgiz, 1963. 234 p. (MIRA 16:9)

1. Soveshchaniye po osnovnym problemam teorii mashin i mekhanizmov. 3d, Moscow, 1961. 2. Chlen-korrespondent AN Ukr.SSR (for Kozhevnikov).

(Mechanisms)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

ZIKOV'YEV, Vyach.; BESSONOV, A.P.; EDEL'SHTEYN, B.V., kand. tekhn. nauk, retsenzent; MEYNGARD, S.A., red.

[Fundamentals of the dynamics of machine units] Osnovy dinamiki mashinnykh agregatov. Moskva, Mashinostroenie, 1964. 238 p. (MIRA 17:9)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.P., kand. tekhn. nauk

Problems in the modern theory of machinery; conference in Kiev. Vest. AN SSSR 34 no.10:112-113 O '64.

(MIRA 17:11)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.P.

Replacing variable masses of a flat mechanism with discrete masses. Teor. mash. i mekh. no.103/104:122-133 '64.
(MIRA 17:11)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.P.; DUBROVSKIY, V.A.

Natural vibration of systems with a variable mass. Teor.mash.i mekh. no.105/106:62-79 '65. (MIRA 18:4)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.P.; SIL'VESTROV, E.Ye.

Periodical movements under the action of a harmonic force in a vibrating system with periodically varying mass. Teor.mash.i mekh. no.105/106:80-86 '65. (MIRA 18:4)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

LEVITSKIY, N.I., doktor tekhn. nauk prof., otv. red.; BLAGONRAVOV, A.A., akademik, red.; BESSONOV, A.P., doktor tekhn. nauk, red.; DIMENTBERG, F.M., doktor tekhn. nauk, prof., red.; ZINOV'YEV, V.A., doktor tekhn. nauk, prof., red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; CHERKUDINOV, S.A., doktor tekhn. nauk, red.

[Current problems in the theory of machines and mechanisms] Sovremennye problemy teorii mashin i mekhanizmov. Moskva, Nauka, 1965. 342 p. (MIRA 19:1)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut mashinovedeniya.

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ACC NR: AP6025215 SOURCE CODE: UR/0380/66/000/002/0015/0025

AUTHOR: Bessonov, A. P. (Moscow); Sil'vestrov, E. Ye. (Moscow)

ORG: none

41
B

TITLE: Transient states of a vibrating system with one degree of freedom with variable mass

SOURCE: Mashinovedeniye, no. 2, 1966, 15-25

TOPIC TAGS: electric analog, transient vibration, electric oscillation, quantum resonance phenomenon, frequency characteristic

ABSTRACT: An electronic analog was used to model the situation when a vibrating system with one degree of freedom changes its mass by a stepped law and passes through resonance. It is concluded that: 1) the maximal dynamic coefficient occurs actually somewhat after the correspondence of excitation frequency and resonant frequency of the system, regardless of whether the mass is increasing or decreasing; 2) the maximal value of this coefficient is always less than for steady-state oscillations; 3) both the value and amount of displacement of the coefficient depend on the rate of passage through the resonant zone. The higher the transition (mass change) rate, the less the amplitude of the resonant oscillations and the further the displacement from the true resonant point of the system. Orig. art. has: 5 figures and 13 formulas. [JPRS: 35,995]

SUB CODE: 09, 20 / SUBM DATE: 12Nov65 / ORIG REF: 004 / OTH REF: 001

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BESSONOV, A.P.

Motion equation for a plane mechanism with a variable mass in energy form. Teor. mash. i mekh. no.92/93:142-147 '62. (MIRA 16:11)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

ARTOBOLEVSKY, I.I.; BESSONOV, A.P.; SHLYAKHTIN, A.V. (Moscow)

"Some problems of machine dynamics with special reference to variable masses and elasticity of links"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964

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USSR/Zooparasitology. Parasitic Worms. General Problems. G

Abs Jour: Ref. Zhur. - Biol., No 23, 1958, 104016

Author : Bessonov, A. S.

Inst : All-Union Institute of Helminthology

Title : Differential Diagnosis of Trichostrongyloidoses (Ostertagiosis, Haemonchosis, Cooperiosis and Trichostrongylosis) of Long-Horned Cattle From the Infesting Larvae

Orig Pub: Byul. nauchno-tekhn. inform. Vses, in-t gel'mintol., 1958, No 3, 31-35

Abstract: A differential diagnosis of larvae of Haemonchus contortus, Cooperia oncophora, Ostertagia ostertagi, and Trichostrongylus axei.

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A. S.: Master Vet Sci (diss) -- "The cycle of development of Ostertagia ostertagi (Stiles, 1892), and the diagnosis and epizootiology of the disease which it causes in cattle". Moscow, 1958. 18 pp (All-Union Order of Lenin Acad Agric Sci im V. I. Lenin, All-Union Inst of Helminthology im Acad K. I. Skryabin), 200 copies (KL, No 4, 1959, 129)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S., aspirant

Testing ditrazine in metastrongylosis of swine. Trudy VIGIS 6:187-190 '59. (MIRA 15:5)
(Piperazinecarboxamide) (Metastrongylus)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S., kand.veterin.nauk

Improvement of the method of trichinoscopy. Veterinariia 39 no.9:62-65 S '62. (MIRA 16:10)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I. Skryabina.

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S., kand.veter. nauk

Cold disinfection of swine carcasses infected with the larvae of Trichinella. Veterinariia 39 no.1:74-78 Ja '63. (MIRA 16:6)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.
(Trichina and trichinosis) (Cold--Physiological effect)

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BESSONOV, A.S., kand. veterinarnykh nauk

Geographical distribution of trichinelliasis in the U.S.S.R. and the characteristics of the foci of this invasion. Trudy VIGIS 10: 37-45 '63. (MIRA 17:9)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S.

An attempt at artificial immunization of animals against trichinosis and utilization of precipitating sera for the diagnosis of this disease according to Ascoli. Wiad. parazyt. 10 no.6:691-716 '64

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina, Moskva, SSSR.

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S., kand. vet. nauk

Role of animal carcasses and slaughterhouse meat waste in swine trichinosis in the White Russian S.S.R. Trudy VIGIS 11:12-21 '64. (MIRA 18:12)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.S., kand. veterin. nauk

Comparative effectiveness of various methods of the diagnosis of trichinelliasis in swine. Veterinariia 41 no.4:61-62 Ap '64. (MIRA 17:8)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I. Skryabina.

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BR[illegible]OV, A.[illegible], starshiy nauchnyy sotrudnik

Diagnosis of trichinelliasis by the [illegible] method. Veterinariia 41 no.4:107-108 Ap '64. (MIRA 18:6)

1. Vsesoyuznyy institut gel'mintologii imeni akademika Skryabina.

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

L 41136-66 EWT(d)/EWT(m)/EWP(k)/EWP(h)/T/EWP(1)/EWP(v)/EWP(t)/ETI RM/JD

ACC NR: AP6025611 SOURCE CODE: UR/0413/66/000/013/0051/0051

INVENTOR: Timoshenko, A. N.; Pidzharyy, A. F.; Bessonov, A. S.

ORG: none

TITLE: Injector-type torch for gas-shielded arc welding. Class 21, No. 183304

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 51

TOPIC TAGS: arc welding, inert gas welding, welding torch

ABSTRACT: This Author Certificate introduces an injector-type welding torch for nonconsumable-electrode arc welding with combined inert gas and flux shielding. In order to simplify the torch design and ensure

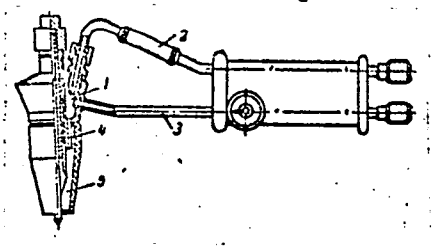

Fig. 1. Injector-type welding torch

Card 1/2 UDC: 621.791.8.034:621.791.8

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

L 41136-66

ACC NR: AP6025611

a continuous feed of the gas-flux mixture to the welding zone, the torch head (see Fig. 1) is provided with ring-shaped chamber 1 with inlets for injector pipe 2 and gas-flux-carrying pipe 3. The chamber is connected to nozzle 5 by ring-shaped channel 4. Orig. art. has: 1 figure. [DV]

SUB CODE: 13/ SUBM DATE: 07May62/ ATD PRESS: 5057

Card 2/2 hs

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

L 41135-66 EWT(m)/EWP(k)/T/EWP(v)/EWP(t)/ETI IJP(c) HM/JD

ACC NR: AP6025610 SOURCE CODE: UR/0413/66/000/013/0051/0051

INVENTOR: Timoshenko, A. N.; Pidzharyy, A. F.; Bessonov, A. S. 38 B

ORG: none

TITLE: Method of argon and flux shielded-arc welding of titanium alloys. Class 21, No. 183303

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 51

TOPIC TAGS: ~~welding~~, metal welding, arc welding, titanium alloy, inert gas welding

ABSTRACT: This Author Certificate introduces a method of argon shielded-arc welding of titanium-base alloys, in which a mixture of argon and flux is fed into the welding zone to ensure reliable protection of the melting pool and adjoining areas of parent metal. [DV]

SUB CODE: 13/ SUBM DATE: 07May62/ ATD PRESS: 5054

Card 1/1 hs UDC: 621.791.8:621.791.8.034

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.V.

BESSONOV, A.V., vrach (Kyzyl)

Where are posters about work and rest? Zdorov'e 4 no.3:13 Mr '58. (MIRA 11:3)

(TUVA AUTONOMOUS PROVINCE--HEALTH EDUCATION)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, A.V., vrach (Khiitola, Karel'skaya, ASSR)

"Medicine and religion" by E.T. Sal'nikov. Zdorov'e 5 no.1:32 Ja '59 (MIRA 11:12)

(MEDICINE AND RELIGION)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

YAVORSKIY, Vasiliy Nikolayevich; BESSONOV, Aleksandr Andreyevich; KOROTAYEV, Aleksey Ivanovich; POTAPOV, Anatoliy Mikhaylovich; KHRUSTALEVA, N.I., red.; GOROKHOVA, S.S., tekhn. red.

[Design of invariant servo system drives] Proektirovanie invariantnykh slediashchikh privodov. [By] V.N.IAvorskii i dr. Moskva, Vysshaia shkola, 1963. 474 p. (MIRA 17:3)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

KAGAN, G.; BESSONOV, B.

Establishing work norms for those who work at several machine tools. Sots.trud 8 no.4:29-31 Ap '63. (MIRA 16:4)
(Metal cutting—Production standards)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

KOZAK, Filipp Grigor'yevich; USHAKOV, Dmitriy Mikhaylovich; SAVKEVICH, D.V., dotsent, kand.tekhn.nauk, retsenzent; BESSONOV, B.V., inzh., red.; SOROKA, M.S., red.izd-va

[Automatic machinery for cutting ceramic materials] Avtomaty dlia rezki keramicheskikh materialov. Kiev, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1958. 141 p. (MIRA 12:4)
(Cutting machines) (Ceramics)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, D. K.

"Basic Immunobiological Reactions During Brucellosis of Cattle and Their Diagnostic Significance at Various Stages of Infection." Sub 26 Dec 47, Moscow Zooveterinary Inst

Dissertations presented for degrees in science and engineering in Moscow in 1947. Degree: Doctor Veterinary Sci.

SO: Sum.No. 457, 18 Apr 55

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, F.G., upravlyayushchiy.

Practice strictest economy in the building industry. Gor.khoz.Mosk. 27 no. 3:5-9 Mr '53. (MLRA 6:5)

1. Moskovskiy gorodskoy kommunal'nyy bank. (Construction industry--Costs)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, F.G.

Some problems in the economic aspects of managing apartment houses.
Gor. khoz. Mosk. 32 no.5:6-8 My '58. (MIRA 11:5)

1.Predsedatel' pravleniya Mosgorbanka.
(Moscow--Apartment houses--Maintenance and repair)
(Moscow--Apartment houses--Accounting)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

PROCESSES AND PROPERTIES INDEX

A 53 B

3022. Brownian Motion of a Linear Lattice. I. Bessonov. *Comptes Rendus (Doklady) de l'Acad. des Sciences*, 1. 8. *pp.* 323–327, 1936.—Krutkow has previously [see Abstract 2841 (1935)] developed a method for the solution of linear problems concerning the theory of the Brownian motion, and has carried out the computations for the case of the vibrator. The author now applies this method to the problem of the Brownian motion of a linear lattice, which is considered as a mechanical system arising out of n points of equal mass, which are arranged at equal distances upon an elastic thread which itself has no mass. The paper is entirely mathematical. H. H. Ho.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, G.

Six cities' exhibition. Sov.foto. 23 no.2:40 F '63.
(MIRA 16:4)

1. Predsedatel' Sevastopol'skogo fotokinokluba.
(Photography—Exhibitions)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

PROZOROV, L.B., kand. tekhn. nauk; BESSONOV, G.S., inzh.

Temperature measuring equipment used in shaft sinking by the freezing method. Shakht. stroi. 8 no.2:14-17 F '64. (MIRA 17:3)

1. Institut gornogo dela imeni A.A. Skochinskogo (for Prozorov). 2. Belorusskoye stroitel'noye shakhtoprokhodcheskoye upravleniye tresta Shakhtspetsstroy (for Bessonov).

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

1. BESSONOV, I.

2. USSR (600)

4. Cottonseed

7. Our practice in preparing cottonseed for sowing, Khlopkovodstvo 3 no. 2, 1953.

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

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, I. (Altayskiy kray, sovkhoz "Komsomol'skiy").

Letter from virgin lands. IUn.nat.no.9:4 D '56. (MLRA 10:2)

1. Sekretar' komsomol'skoy organizatsii.
(Altai Territory--State farms)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L.

BESSONOV, L., SAKHAROV, S. A., KURSHINSKIY, E. V., and LEBEDEV, G. A.
Institute of High Molecular Compounds of the Acad. Sci. USSR, Leningrad

"Mechanical Rupture of Hard Polymer Materials"
Paper submitted at.
Program of ht Conference on the Non-Metallic Solids Mechanical Properties. Leningrad
May 19 - 26, 1958

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

MILIN, V. B. AND BESSONOV, I. I.

Measurement of Density of Volume Charge in a System of Artificial Ionization

Experimental data on distribution of density of volume charge formed under action of a linear source, depending on distance from source and on atmospheric turbulence are given. A close bond between the horizontal density and the intensity of atmospheric turbulence was found. (RZhFiz, No. 8, 1955) Uch. Zap. Kirovskogo Ped. in-ta, 1, No. 8, 1954, 29-36

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, In.Iv.

Composition of the ancient substratum of Ciscaucasia.
Dokl. AN SSSR 110 no.3:421-422 S '56. (MLRA 9:12)

1. Severo-Kavkazskoye geologicheskoye upravleniye. Predstavleno akademikom D.S. Korzhinskim.
(Caucasus, Northern--Geology, Stratigraphic)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

ARKHANGEL'SKIY, Mikhail Mikhaylovich; PAVLENKO, A.A., dots., retsenzent; BESSONOV, I.I., dots., retsenzent; CHEBOTAREVA, A.V., red.; KARPOVA, T.V., tekhn. red.

[Course in physics; mechanics] Kurs fiziki; mekhanika. Moskva, Gos. uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1961. 407 p. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet (for Pavlenko).
2. Kirovskiy pedagogicheskiy institut (for Bessonov).
(Mechanics)

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

18

Investigation of Longitudinal Cracks in the Bottoms of Rails. T. Golubev, K. Bessonov and A. Murzov. (Stal, 1940, No. 5-6, pp. 64-66). (In Russian). Some types of cracks in rails are considered. Those most frequently encountered at the Kuznetskiy Works were due to the opening up of sub-surface blowholes and could be distinguished from cracks caused by rolling stresses, by decarburisation and the marked ferrite network associated with this.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, K. A.

BESSONOV, K. A.: "High-speed steel containing tungsten and nickel, for a cast tool of complex shape." Siberian Metallurgical Inst imeni Sergo Ordzhonikidze. Acad Sci USSR. West Siberian Affiliate. Novosibirsk, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya letopis', No 23, 1956

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

AUTHORS: Bessonov, K. A. and Bondarev, Yu. Ye. SOV/126-6-3-30/32

TITLE: Changes in the Mechanical Properties of Steels Stored (Aged) for Various Durations After Heat Treatment (Izmeneniye mekhanicheskikh svoystv stali pri vyderzhke posle termoobrabotki)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 3, pp 571-573 (USSR)

ABSTRACT: It is well known that the mechanical properties of steel determined immediately after hot rolling and after subsequent holding at normal temperatures may differ considerably. Usually this phenomena is referred to as ageing. S. Filimonov (Ref 1) carried out special observations relating to the changes of the mechanical properties of rail and axle steel after forty-day ageing, and detected an insignificant increase in the long duration strength and an appreciable (9 to 12%) increase of the relative contraction; the properties of low carbon steel during that period remained practically unchanged. A drawback of the work of Filimonov is the fact that for determining the deformation the author used an equivocal characteristic, the relative contraction. The

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SOV/126-6-3-30/32

Changes in the Mechanical Properties of Steels Stored (Aged) for Various Durations After Heat Treatment

process of plastic deformation of steel is composed of uniform deformation and deformation localised in the neck and, according to P. O. Pashkov (Ref 2), the physical nature of these two stages differs. G. I. Pogodin-Alekseyev (Ref 3), P. O. Pashkov (Ref 4) and L. S. Moroz (Ref 5) tried to elucidate separately the influence on the uniform deformation and the influence on the localised deformation of various factors. Their work revealed that with the total relative contraction in the neck remaining unchanged, the relation of the individual components of the deformation may change appreciably. In this work the authors investigated the mechanical properties as a function of time of rimmed Steel 3. They carried out tensile tests and determined the yield point, the ultimate strength, the uniform elongation and the total relative contraction in the neck and also the impact strength as well as the threshold of cold brittleness. All the specimens were subjected to normalisation annealing at 920°C for one hour. The structure of the steel consisted of ferrite and pearlite and the heat treatment was effected on the finished

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SOV/126-6-3-30/32

Changes in the Mechanical Properties of Steels Stored (Aged) for Various Durations After Heat Treatment

specimens. For preventing decarburisation of the surface layer, the specimens were placed into activated carbon which was covered on the top by a layer of sand for reducing the combustion intensity. As a result, the micro-structure in the cross section was practically uniform. The cooling in static air and the simplicity of the configuration of the specimen excluded the possibility of Type I stresses. The first group of tests was effected the first day after heat treatment, whereby the tensile strength characteristics were determined from the diagrams of the real stresses for specimens with 10 mm dia. The impact strength was the average value obtained for three standard specimens at each temperature. The subsequent tests were repeated sixty days later; tensile tests were made additionally after 90, 120 and 150 days. The results of these measurements are graphed in Figs.1 and 2. The following conclusions are arrived at:

1. Long duration ageing at room temperature after normalisation annealing of the investigated steel led to

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SOV/126-6-3-30/32

Changes in the Mechanical Properties of Steels Stored (Aged) for Various Durations After Heat Treatment

an appreciable decrease of the uniform elongation, which is explained by the cold hardening of the ferrite resulting from type II stresses which are generated owing to the differences of the coefficients of linear expansion of individual phases; the yield point, the ultimate strength and the relative contraction increased somewhat.

2. Due to a decrease in the uniform elongation, the impact strength decreased throughout the entire investigated temperature range (-50 to +20°C) and the threshold of cold brittleness shifted towards the range of higher Temperatures. There are 2 figures and 8 Soviet references.

ASSOCIATION: Khimiko-metallurgicheskiy institut Zapadno-Sibirskogo filiala AN SSSR (Chemico-Metallurgical Institute, West Siberian Branch, Ac.Sc. USSR

SUBMITTED: Jan.4, 1957 (Initially), Feb.18, 1957 (After revision)

1. Steel--Heat treatment 2. Steel--Mechanical properties
3. Steel--Aging 4. Steel--Test methods

Card 4/4

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

AUTHORS: Bessonov, K.A., Stankevich., O.F. 32-24-4-47/67

TITLE: The Determination of the Elasticity Constant by the Dynamic Method on Short Investigation Samples (Opredeleniye konstant uprugosti dinamicheskim metodom na korotkikh obraztsakh)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 480-482 (USSR)

ABSTRACT: In order to avoid the disadvantage caused by long and relatively thin investigation samples, the production of which frequently represents difficulties, a device for the determination of the elasticity and bending modulus was constructed, in which samples of 40-50 mm length and about 4.0 mm diameter were used. An illustration shows the device for the determination of the normal elasticity modulus E, and it follows from the description that a generator of the sound frequency 3G-10 and a cathode oscillograph E 07 are used, in which case a higher capacity is necessary for the investigation of short samples for the excitation of resonance and oscillations than in the case of long samples, it being essential that the samples are fastened to the holders in a stable manner. The investigation showed that $E_{measured}$ of the "normal samples" does not differ considerably from that of short samples

Card 1/2

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(less than 2%). The maximum average quadratic deviation, which is calculated according to a formula, is 0.2%. The method of investigating cylindrical short samples in the case of torsional oscillations was suggested by K.A. Bessonov and is mentioned in the description of the testing device for measuring the bending modulus G. In the latter a sound generator EG-10 excites the torsional oscillations in the sample, in which case the axis of the sample is in a state of relative symmetry to the magnetic system. The bending modulus G is computed according to a formula, and samples of tungsten, copper, and steel with resonance effects within the range of 10000-16000 c were measured. The maximum error limit in the case of steel and copper is 2.5% and can be reduced to 1% in the case of the production of samples of high precision. Elasticity constants of metallo-ceramic copper-tungsten compositions were determined, from which it is not possible to produce long samples. There are 3 figures, 1 table, and 4 references, 3 of which are Soviet.

ASSOCIATION: Zapadno-Sibirskiy filial Akademii nauk SSSR (West-Siberian Branch, AS USSR)

1. Metals--Elasticity 2. Metals--Testing equipment
3. Mathematics

Card 2/2

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10.8100 also 1327 2108 1160 3209

29081
S/521/60/000/014/001/015
E193/E383

AUTHORS: Bessonov, K.A. and Stankevich, O.F.

TITLE: Concerning the problem of determination of elastic properties on small specimens

SOURCE: Akademiya nauk SSSR. Sibirskoye otdeleniye.. Khimiko-metallurgicheskiy institut. Trudy. no. 14, Novosibirsk, 1960. Metallovedeniye i prochnost' metallov. 3 - 9

TEXT: The standard methods of determining the elastic and shear moduli (E and G) require relatively large metal specimens (diameter d = 20 mm, length ℓ = 100 or 200 mm) and correspondingly powerful testing machines. The accuracy of these methods is also relatively low (± 3.5%), partly owing to the fact that high stresses used in the measurements may cause creep of the test pieces and affect the accuracy of the results. The dynamic method of determining E and G from the resonance frequency of natural vibrations of long and thin specimens (d = 4.76 - 15 mm, ℓ = 150 - 250 mm) is free from these

Card 1/6

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disadvantages and yields results accurate to 1%, its main shortcoming being that specimens with $\ell/d \approx 33$ have to be used and these may be difficult to prepare from very soft or very brittle materials, apart from the fact that the quantity of material required for such a long specimen may not be always available. It was for this reason that a search for means of overcoming this difficulty was instigated and, after many unsuccessful attempts, equipment was designed at the metallographic laboratories of the Siberian Branch of the AS USSR with the aid of which E and G can be determined by the dynamic method on specimens with $\ell/d = 12$ and $d = 4.0$ mm. In determining E, a cylindrical specimen is suspended at its nodes (i.e. at points $0.224\,\ell$ distant from each end). One of the suspension wires is attached to a vibrating rod, the other being rigidly connected to a piezo-element. Transverse vibrations of the natural frequency are excited in the specimen by a sonic frequency-generator and the resonance frequency is determined with the aid of a cathode oscillograph. In contrast to the standard dynamic method, in which the specimen is

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suspended loosely, tight loops have to be used on short specimens, otherwise it will be impossible to ensure excitation. Copper suspension wires (up to 100 mm long) of at least 0.4 mm in diameter, have to be used but thinner tungsten or nichrome wires can be employed if necessary (for instance, for measurements at elevated temperatures). The elastic modulus is calculated from the formula:

$$E = 1.639 \cdot 10^{-8} \left(\ell^3/d^4\right) Pf^2, \ \mathrm{kg/mm^2} ,$$

where ℓ is the specimen length (cm),
d its diameter (cm),
P its weight (g), and
f the resonance frequency (c.p.s.).

The magnitude of E of brass, determined by this method on specimens with $\ell/d = 12$, was only 2% lower than that determined on specimens with $\ell/d \approx 33$. This finding was taken to indicate that there is no need to apply the correction recommended by some workers (Ref. 12 - A.S. Matveyev, Ye.Kh. Ripp and L.S. Freyman - Zav. laboratoriya, no. 5, 1952).

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The correction is calculated from a formula (Ref. 13 - Dzh.V. Strett (Rayleigh). Theory of Sound, v. 1, Gostekhizdat, 1955):

$$\frac{f_{\Phi}}{f_{изм}} = 1 - 28.9\left(\frac{R}{\ell}\right)^2$$

where R is the radius of the cylindrical specimen,
ℓ its length,
$f_{изм}$ the measured frequency,
f_{Φ} the corrected frequency.

In the second part of the present paper a method of determining G , developed by K.A. Bessonov, is described. In this case, a short specimen, shown in Fig. 3 (dimensions in mm), is used. Its square end is secured firmly between a rigid support pillar and a plate, the latter being secured to the former by 4 bolts. The free end of the cylindrical portion of this specimen is placed between two poles of an electromagnet.

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29081
S/521/60/000/014/001/015
E193/E383

Concerning the problem ....

On both sides of this end, in a plane perpendicular to the main axis of the electromagnet poles, two small electromagnets connected to a sonic frequency-generator are situated, which incite torsional vibrations in the specimen whose axis coincides with the axis of symmetry of the magnetic system. Between the parts (plate and supporting pillar) which grip the square end of the specimen, a piezo-element is also placed. The torsional vibrations of the specimen generate elastic vibrations in the plate and this is sufficient to obtain a clear indication on the screen of a cathode oscillograph. G is then calculated from the formula:

$$G = 1.63 \cdot 10^{-4} \rho l^2 f_{kp}^2, \ kg/mm^2 ,$$

where ρ is the density (kg/cm^3) of the specimen,

l the length of the cylindrical portion (cm), and

f_{kp} the frequency (c.p.s.) of the torsional vibrations.

The results of the measurements do not depend on the actual diameter of the specimen used but great care should be taken to

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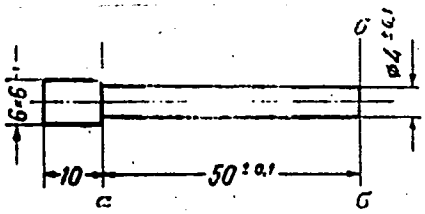
ensure that planes a - a and b - b (see Fig. 3) are perpendicular to the specimen axis. This method was used to determine G of steel and copper and gave results accurate to 2.5%. The methods described in the present paper were also successfully used for the determination of E and G of Cu-W powder sintered compacts in which case it would be impossible to prepare specimens with a large l/d ratio such as is required in other methods. There are 4 figures, 3 tables and 13 references: 11 Soviet-bloc and 2 non-Soviet-bloc. The two English-language references mentioned in the article are: Ref. 11 - M.H. Roberts, G. Northcliffe - J.of the Iron and Steel Institute, November, 1947; Ref. 10, Förster, Koster. Engineer, vol. 166, 1938, p. 626.

Fig. 3:



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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

S/137/61/000/002/044/046
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1961, No. 2, p. 45 # 21381

AUTHORS: Bessonov, K.A., Bondarev, Yu.Ye.

TITLE: Methods of Determining Deformed Volume During Bending

PERIODICAL: "Tr. Khim-metallurg. in-ta, Sib. otd. AN SSSR", 1960, No. 14, pp. 123-125

TEXT: The authors describe a combined method of determining the magnitude of deformed volume. On the specimen surface, covered with a thin layer of black India ink, a network of quadratic cells was applied. To permit the accurate determination of the boundaries of the deformed zone, the side surface of the specimen was covered with a thin layer of a 50% - solution of colophony in acetone. After holding for 4 h at 150°C the varnish became brittle and peeled off the surface during bending. At this moment the degree of deformation was measured. The magnitude of stresses, corresponding to the appearance of the first cracks, proved to be equal to the yield limit; consequently the varnish applied to the metal surface suffers failure at ~0.2% plastic deformation. The volume deformed was calculated by the formula $V_{def} = V_o = nb_oF_o$, where n is the number

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of deformed cells, b_o is the initial width of the specimen, F_o is the initial area of one cell. The authors show the dependence of the volume deformed on the bending angle, obtained by planimetric measuring of the lateral specimen surface and by the network method.

V. F.

Translator's note: This is the full translation of the original Russian abstract.

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

21634

S/137/61/000/003/051/069
A006/A101

18.8200 1138, 1413, [redacted]

AUTHORS: Bessonov, K. A., Bondarev, Yu. Ye., and Klestova, T. F.

TITLE: Anisotropy of mechanical properties in cold rolled aluminum

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 3, 1961, 28, abstract 3Zh176 ("Tr. Khim.-metallurg. in-ta, Sib. otd. AN SSSR", no. 14, 1960, 159-162)

TEXT: An investigation was made on cold rolled 10-mm thick Al bars of rectangular section. It was shown, from imprints made on the bar surface with a 10-mm diameter ball and from the cracking of the brittle varnish coating covering the surface, that cracking occurred mainly at an angle of 45° in respect to the axis of rolling. It was established that maximum cold hardness of Al is found in the longitudinal direction, the least at the 45° angle to the axis of rolling, and that annealing at 540°C for 24 hours did not eliminate completely the anisotropy of the properties. It is noted that already at relatively low plastic deformations the round section of the specimens transforms into an oval one, whereby the difference between the axes of the oval increases with greater deformation and attains a maximum in the journal at the moment of rupture. The

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21634

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A006/A101

Anisotropy of mechanical properties ...

authors analyze the figures of pressure from a pointed needle on the section planes differently oriented in respect to the rolling direction.

P. Z.

[Abstractor's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

21787

S/123/61/000/004/005/027
A004/A104

18.8200 2408, 4016, 1413

AUTHORS: Bessonov, K. A.; Bondarev, Yu. Ye., and Klestova, T. F.

TITLE: Anisotropy of mechanical properties in cold-rolled aluminum

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1961, 15, abstract 4A127 ("Tr. Khim.-metallurg. in-ta. Sib. otd. AN SSSR", 1960, no.14, 159-162)

TEXT: The authors found a strong anisotropy of mechanical properties in cold-rolled aluminum and determined the direction of maximum and minimum cold-working. They describe phenomena of distortion of the cross section shape of the stretched specimen and determine the grain orientation during rolling.

[Abstractor's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

16.8200 1454, 1418, 1413

23271
S/123/61/000/006/001/020
A104/A134

AUTHORS: Bessonov, K. A., and Stankevich, O. V.

TITLE: On the problem of determining elastic properties on small specimens

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, No. 6, 1961, abstract 6A168 (Sb. Khim.-metallurg. instituta Sib. otd. AN SSSR, 1960, No. 14, 3-9)

TEXT: The authors describe the method and apparatus for the determination of the modulus of elasticity on small reduced specimens with a ratio of $\frac{l}{d} = 12$, d = 4.0 mm. When E is being determined in a cylindrical specimen suspended in packs, i. e. at a distance of 0.224 length from the [illegible], transverse vibrations of the fundamental tone are excited with the aid of a [illegible] around [illegible]. The resonance moment was fixed by a cathode oscilloscope. The modulus is calculated by the formula

$$E = 1.639 \cdot 10^{-8} \cdot \frac{l^3}{d^4} \cdot \gamma f^2 \text{ kg/mm}^2,$$

where l - specimen length (cm), d - diameter (cm), γ - specific weight (gm/cm³), f - resonance frequency (cycles). The main characteristic of the testing method

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

23271
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A004/A104

On the problem of determining . . .

of cylindrical short specimens, fastened in the cantilever way, during torsional vibrations consists in the fact that on both sides of the face ends of the clamped specimen in the plane perpendicular to the main axis of electromagnet pole shoes, 2 small electromagnets are positioned which, being connected to a sound generator, excite torsional vibrations in the specimen. The specimen axis is symmetrical relative to the magnetic system. The torsional specimen vibrations generate elastic oscillations in the plates clamping the specimen on the device bed which is sufficient to obtain a legible effect on the oscillograph screen. The modulus of rigidity is determined by the formula

$$G = 1.63 \cdot 10^{-4} \cdot \rho l^2 f_{to}^2 \text{ k /mm}^2,$$

where ρ - density of the rod (kg/cm^3), l - length of cylindrical part of the specimen (cm), f_{to} - frequency of torsional vibrations (cycles). The errors of the method do not exceed 2.5% for steel and copper. There are 4 figures and 13 references.

G. Mekhed

[Abstractor's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, K.A.; BONDAREV, Yu.Ye.

Methods of establishing a deformed volume during bending. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.14:123-125 '60. (MIRA 14:10)
(Deformations (Mechanics)--Testing)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, K.A.; BONDAREV, Yu.Ye.; KLESTOVA, T.F.

Anisotropy of mechanical properties in cold-rolled aluminum. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.14:159-162 '60. (MIRA 14:10)
(Aluminum--Cold working)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

On 14 June 1946, at the Power Engineering Institute imeni Molotov, defended his dissertation on " A Calculation of Electric Circuits Containing Choke Coils with Steel, Taking into Consideration Hysteresis". Official opponents - Doctor of Technical Sciences Professor G. S. Aranzon, and Candidate of Technical Sciences A. A. Fel'dbaum.

So: Elektrichestvo, No 4, April 1947, pp 90-94 (U-5577, 18 February 1954)

Methods were presented for the analytic expression of the hystersis loop using DC and AC circuits for the computations. The suitability was investigated of various methods of integrating nonlinear differential equations which arise in calculating electric circuits containing choke coils with steel, taking into consideration hysteresis. It was shown that approximate integration of these equations may be accomplished by means of direct variation methods, the collocation method, the method of least squares, and the method of comparing coefficients. Integration was carried out using all these methods on equations for circuits containing resistance, capacitance, leakage inductance, and choke coils with steel. The method presented was used to investigate the critical conditions in ferroresonance of voltages, and an analytic dependence of the critical voltage on frequency was found. Formulas were presented for the approximate calculation of hystersis losses in nonsinusoidal current.

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L.A., inzhener.

Losses in steel during magnetizing. Vest.elektroprom. 18 no.12:19-22 D '47. (MLRA 6:12)

1. Moskovskiy energeticheskiy institut im. V.M.Molotova.
(Electromagnetism)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

Author: Bessonov, L. A.

Title: The Electrical Steel Connections. (Elektricheskie tsepi so stal'iu.) 344 p.

City: Moscow
Publisher:
~~Publication~~: The State Printing House of Energetics.

Date: 1948

Available: Library of Congress

Source: Monthly List of Russian Accessions, Vol. 3, No. 12, p. 636

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L.A.

USSR 7522. Author of the books: "Principal Schemes for the Construction of T Throttles of Saturation and Magnetic Amplifiers" and "About Loses in Steel Through Magnetisation". Elektrichestvo May 1948

SÖ: USFA Special Bi-weekly Rpt 79 26 Nov 48 (S)
ID 512150

Cand. Technical Sci. Engr., Moscow Energetics Inst. imeni V. M. Molotov, 1947-1950 Power Engineering

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

PROCESSES AND PROPERTIES INDEX

SA

#5 64
a

Calculation of electric circuits, allowing for hysteresis loss. Bernoulli, L. A. *Elektrichestvo* (No. 1) 45-51 (1948) in Russian.—A critical survey of methods suggested for calculating mathematically a hysteresis loop, including two methods devised by the author. In one of these, discussed in detail, an equation $i = aB_m^n$ is assumed for a magnetization curve and an equation derived for a hysteresis loop. The wave-form of the magnetizing current is deduced. M. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L.A.

42258 Analiticheskiy raschet trekh faznogo utroitelya chastoty s uchetom reaktsii nagruzki. Trudy Mosk. energet. in-ta im. Molotova, VYP. 3, 1948, s. 46-49.

SO: Letopis' Zhurnal'nykh Statey Vol. 47, 1948

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV L.A.

42259 Bessonov, L.A. Postoyannaya induktivnost' i drosel' so stal'yu god Klyuchennyye K sinusoidal'nomu nagryazheniyu. Trudy Mosk. energet in-ta im Molotova, VYP 3. 1948, s 150-52

SO: Letopis' Zhurnal' nykh Statey, Vol. 47, 1948

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

USSR/Electricity Apr 48
Amplifiers, Magnetic
Coils - Winding

PA 6/49T2

"Principles of Design of Saturation Coils and Magnetic Amplifiers," L. A. Bessonov, Cand Tech Sci, Moscow Power Eng Inst imeni V. M. Molotov, 6 pp

"Vest Elektro-Prom" No 4
also in Avtomat. i Telemekh. - 9, No-4, 1948

Describes basic principles of construction. Discusses parallel and series connection of AC winding, relation between simultaneous magnetization characteristics of П- and Ш- shaped designs, influence of air gaps on magnetization characteristics,

[redacted] 6/49T2

USSR/Electricity (Contd) Apr 48

decrease of leakage, speed of regulating, and performance criteria. Gives theory only where essential for proper understanding of operating conditions.

BESSONOV, L. A.

[redacted] 6/49T2

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A. PA 3/49T27

USSR/Electricity May 48
Coils, Choke
Reactance

"Use of Saturation Choke Coils in Modern Engineering," L. A. Bessonov, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov, 15 pp

"Elektrichestvo" No 5

Discusses subject coils as regulators of reactance, of DC transformers, and magnetic amplifiers, basic theories of coils, and circuits which permit their use to make them sensitive to the control current polarity. Gives other circuits showing adaptability of saturation choke coils.

[redacted] 3/49T27

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

PA 13/49T32

USSR/Electricity Jul/Aug 48
Amplifiers, Magnetic
Coils, Choke

"Calculations for the Characteristics of Saturated Choke Coils of Magnetic Amplifiers," L. A. Bessonov, Moscow Energetics Inst imeni V. M. Molotov, 7 3/4 pp

"Avtomatika i Telemekh" Vol IX, No 4

Outlines new method for the analytical design of saturated choke coils of various magnetic amplifiers. Bases method on analytical expression for family of curves of synchronous magnetization by direct and alternating fields.

[redacted] 13/49T32

USSR/Electricity (Contd) Jul/Aug 48

Applies method to design of subject coils and magnetic amplifier stages. Submitted 25 Aug 1947.

[redacted] 13/49T32

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

PROCESSES AND PROPERTIES INDEX

3922. Critical conditions for ferroresonance of (electrical) potential. Rezhnov, L. A. *Elektrichestvo* (No. 2) 61-3 (Feb., 1949) *In Russian.*—Mathematical analysis shows unsuitability of application of the phenomenon to circuits operating over a wide frequency range. Methods are shown for overcoming this difficulty in automatic voltage regulators and protective relays. J. L.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

SA

B 64

a

ANALYTICAL CALCULATION OF ELECTRIC CIRCUITS ALLOWING FOR HYSTERESIS.
L. A. Bessonov. Elektrichestvo (No. 3) 47-51 (March, 1949) In Russian
A continuation of a previous paper (Abstr. 1860 (1948)). Calcualtion of magnetization current as a power series of the form $\alpha B + \beta B^3 \ldots$ is only approximate as it ignores hysteresis. A modification which will give the complete current , is proposed for use where greater accuracy is required. Four different methods of solving the differential equation resulting from R, L and C circuit are again compared and shown to give identical results.

M.Birnett

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

PA 167T14

USSR/Electricity - Magnetic Amplifiers May 50
Regulation

"Analytical Determination of Constant Flux in a Saturable-Core Reactor," L. A. Bessonov, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 5, pp 61-65

Solves problem of reducing constant magnetic-flux component with ac windings in series when, due to even harmonics, form of alternating flux may be far from sinusoidal. For range of alternating flux values, complex relationship between constant and

167T14

USSR/Electricity - Magnetic Amplifiers May 50
(Contd)

alternating flux can be reduced to a similar relationship when flux is sinusoidal by introducing corrective factor. Submitted 7 Feb 50.

167T14

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

"Transitional Processes inSchemes of Automatic Control with Magnetic Amplifiers and Choking Coil Pressure," Avtom. i Telemakh., 12, No.4, 1951

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, L. A.

PA 167T26

USSR/Electricity - Magnetic Amplifiers Aug 50
Transients

"Transient Processes in a Magnetized Coil Caused by Sudden Changes in the AC Amplitude," L. A. Bessonov, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 8, pp 50-53

Explains, by change in constant component of flux, transient processes occurring during sudden changes of ac voltage applied to magnetized coil. Discusses analytical method determining laws of change in currents and

167T26

USSR/Electricity - Magnetic Amplifiers Aug 50
(Contd)

constant flux component as a function of time. Method applies to sudden ac voltage increases or decreases and to ac windings in parallel or series connection.

167T26

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"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

USSR/Electricity - Transients May 51
Nonlinear Elements

"A Graphical-Analytical Method of Calculating Transients in Electrical Circuits With Nonlinear Elements," L. A. Bessonov, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 5, pp 66-70

Shows that V. Volynkin's graphical-analytical method of calcg transients may be generalized to include circuits of the 2d, 3d, and higher orders contg several nonlinear elements. Method is simple, does not require planimetering

189T29

USSR/Electricity - Transients May 51
Nonlinear Elements (Contd)

of areas, permits consideration for hysteresis and asymmetry of characteristics of nonlinear elements, and is applicable for any initial conditions or any form of emf. Submitted 22 Nov 50.

189T29

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

AID P - 4122

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 9/33

Author : Bessonov, L. A., Kand. Tech. Sci.

Title : Calculation of complex ramified non-linear electric and magnetic circuits.

Periodical : Elektrichestvo, 12, 39-43, D 1955

Abstract : The author presents a calculation of complex non-linear d-c circuits and also of magnetic circuits with a constant m.f. The method consists in building voltampere sections of the circuit with inflowing currents. The author explains the technical details of his method and gives a numerical example of calculations of a full four-node circuit. Thirteen diagrams.

Institution : All-Union Correspondence Institute of Power Engineering.

Submitted : D 28, 1954

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

Name: BESSONOV, Lev Alekseyevich

Dissertation: Self-modulation and certain dynamic phenomena in electric circuits with steel

Degree: Doc Tech Sci

Affiliation: All-Union Correspondence Power Engineering Inst

Defense Date, Place: 14 Jun 56, Council of the Inst of Automatics and Telemechanics Acad Sci USSR

Certification Date: 29 Jun 57

Source: BMVO 18/57

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"

"APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3

BESSONOV, Lev Alekseyevich

[Theoretical principles of electric engineering; lectures and exercises] Teoreticheskie osnovy elektrotekhniki; lektsii i uprazhneniia. Moskva, Tipografiia Gosenergoizdata, 1957. 1 v. (MIRA 13:5)

(Electric engineering)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120008-3"