SKRAMTAYEV, B.G., doktor tekhn. nauk; SHUBENKIN, P.F., kand. tekhn. nauk;
    Budilov, A.A., kand. tekhn. nauk

Unified design of concrete mixture. Standartizatsiia 22 no.1:24-28
Ja-F '58.   (MIRA 11:2)
                              (Concrete)

> H... ..... Y)

SOV/97-59-1-10/18

AUTHOR: Pflaumer, O.E., Candidate of Technical Sciences

TITLE: Definition of Strength of Concrete in Tension Using Compressed
         Cylindrical Testing Samples (Opredeleniye na szhimayemykh
         tsilindricheskikh obraztsakh prochnosti betona pri rastyazhenii)

PERIODICAL: Beton i Zhelezobeton, 1959, Nr 1, pp 33-36 (USSR)

ABSTRACT: The strength of concrete during tensioning can be obtained
         with satisfactory accuracy using cylindrical testing samples
         of 15 mm diameter and 30 cm length, loaded longitudinally
         (as illustrated in Fig.2), and 15 mm wide and 3 mm thick pads.
         In a similar way the strength of natural stones during
         elongation can be defined, but in this case the cylindrical
         stone samples have a diameter of 5 cm.   The method described
         has many advantages, and standardization is advocated.   Fig.1
         gives the types and sizes of various non-standardized testing
         samples as used at present for definition of the strength of
         concrete during tensioning.   In 1947 F. Carneiro (Brazil)
         devized a new method of testing the strength of concrete in
Card 1/3 tension, which considerably reduces the shortcomings of

SOV/97-59-1-10/18

Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples

existing methods.   This new method is based on the   Hertz
principle of distribution of stresses in a thin circular
disk compressed on the perimeter by two forces (see Fig.3).
Fig.4 shows characteristics of the distribution of tensions
in a cylinder.   Various tests have been carried out in
Russia (A.D. Osipov: "Definition of the limit of strength of
concrete at compression", published in Gidrotekhnicheskoye
stroitel'stvo 1956, Nr 8;   and B.G. Skramtayev, P.F. Shubenkin
and A.A. Budilov: "New method for the definition of strength
of concrete during tensioning" in Stroitel'naya promyshlennost',
1958, Nr 3) and abroad.   Tests carried out both in England
and by the Institute for Building Materials ASiA SSSR   are
described in detail.   Fig.5 shows cylindrical samples
undergoing actual tests.   Fig.6 shows graphs of the
relationship between the strength of concrete during
compression and tension carried out according to NiTU-123-55.
In 1957 the Institute of Building Materials carried out three
comparative tests to establish the strengths of various
marks of concrete during tensioning, using (a) tensioned
Card 2/3 rectangular samples,   (b) bent rectangular samples,

SOV/97-59-1-10/18

Definition of Strength of Concrete in Tension Using Compressed
Cylindrical Testing Samples

      and (c) cylindrical samples. The composition of concrete
mixes, the time of hardening, the strength of the concrete
samples at the time of testing, and the strength in compression,
are tabulated. Before the mechanical tests, the homogeneity
of the concrete of all samples was tested by means of ultra-
sound. Both foreign and Russian tests prove the worth
of the method of defining the strength of concrete during
tensioning shown in Fig.2. There are 6 figures and 1 table.

Card 3/3

SHUBENKIN, P., dotsent, kand. tekhn. nauk

Double grinding of concrete in concrete plants and on construction
sites. Stroitel' no.3:29 Mr '59.   (MIRA 12:6)
(Concrete) (Crushing machinery)

L 12228-63   EWG(s)-2/EWP(j)/EPF(c)/EWT(m)/BDS   ASD   Pw-4/Pc-4/Pr-4   RM/WW
ACCESSION NR: AP3001530   S/0032/63/029/006/0732/0733   69

AUTHOR: Shubenkin, P. F.

TITLE: Method for determining the end point of the polymerization process in plastic compounds

SOURCE: Zavodskaya laboratoriya, v. 29, no. 6, 1963, 732-733

TOPIC TAGS: plastic compound, polymerization, condensation, ultrasonic impulse, cathode-ray tube

ABSTRACT: Since it is difficult to determine the end point of polymerization in the preparation of articles from plastic materials, the author applied to this purpose the ultrasonic impulse method used in controlling the quality of concrete items.   It is possible to determine the properties of the medium from the character of a signal traveling through it as registered by a cathode-ray tube. The apparatus is previously calibrated for the kind of material to be handled by a standard specimen.   Experiments on checking the quality of samples prepared on a furfural acetone base demonstrated that the degree of polymerization can be rapidly determined by estimating the time required by the ultrasonic impulse to go through, a steady time interval indicating the completion of polmerization.   The

Card   1/2

L 12778-63
ACCESSION NR: AP3001530

aging of plastic compounds can be checked in a similar way.

ASSOCIATION: Voyenno-inzhenernaya akademiya im. V. V. Kuyby*sheva (Military-
Engineering Academy)

SUBMITTED: 00   DATE ACQ: 17Jun63   ENCL: 00

SUB CODE: 00   NO REF SOV: 001   OTHER: 00

Card   2/2

SHUBENKIN, P.F.

Method for determining the termination of polymerization of plastics. Zav. lab. 29 no.6:732-733 '63.   (MIRA 16:6)

1. Voyenno-inzhenernaya akademiya imeni V.V. Kuybysheva.
        (Polymerization)   (Plastics)

SHUBENKO,

"Heat Transfer and Aer-Hydrodynamics," 1949,(edited by SHUBENKO)

POPOVA, N.N.; PTL.N.T.; SHUBENKO, G.L.; KURMANOV, M.I., kand. tekhn. nauk, nauchnyy rukovoditel' raboty

Effect of the cerium subgroup of rare-earth elements on the structure and properties of a carbon steel ingot. Sbor.trud. ONIIM no.11:250-261 '65.

(MIRA 18:11)

POPOVA, N.N.; BUTKO, N.I.; SHUBENKO, G.I.

Microscopic determination of cerium sulfide inclusions. Zav.lab.
31 no.3:327-330 '65.   (MIRA 18:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.

DYUBIN, N.P.; DYUBINA, A.V.; SVIRIDENKO, F.F.; KARPUNIN, A.M.; Prinimali
uchastiye: LEVCHENKO, N.D.; POPOVA, N.N.; TROFIMOV, V.V.;
SHUBENKO, G.L.; CHETVERTKOV, A.V.; RYABININ, N.G.; ZEMLYANSKAYA,
L.I.; FRADINA, M.G.; ORGIYAN, V.S.; SABUTSKIY, F.M.; MOMGELI, A.V.;
BUL'SKIY, M.T.; FRADIN, M.D.; VALENKO, N.S.; KUCHERYAVYY, Yu.P.;
CHEPELEV, P.M.; SABUROV, T.A.; POLYAKOV, P.M.; MALASHENKO, R.B.

Effect of the temperature of rail rolling on their quality.
Sbor. trud. UNIIM no.11:344-353 '65.   (MIRA 18:11)

KAZIMAYEV, M.D., prof.; SHUBENKO, I.N., prozektor

Papilloma of the nose and maxillary sinus. Vest.otorin. 20
no.2:119-121 Mr-Ap '58.   (MIRA 12:11)

1. Iz kliniki bolezney ukha, gorla i nosa Azerbaydzhanskogo
instituta usovershenstvovaniya vrachey, Baku.
            (NOSE, neoplasms
                papilloma (Rus))
            (MAXILLARY SINUS, neoplasms
                papilloma (Rus))
            PAPILLOMA, case reports
                nose & maxillary sinus (Rus))

SHABANOVA, K.K.; SHUBENKO, L.P.; SHISHOVA, K.G.; CHAYKA,G., red.

[Malaria in Central Asia; bibliographic index of literature,
1878-1961] Malariia v Srednei Azii; bibliograficheskii uka-
zatel' literatury (1878-1961 gg.). Tashkent, Med. gos. izd-
vo M-va zdravookhraneniia UzSSR, 1963.   122 p.
(MIRA 17:8)

1. Moscow. Gosudarstvennaya nauchnaya meditsinskaya biblio-
teka.

SHUBENKO, M. A.   PA 4/49T24

USSR/Chemistry - Polarography, in   Apr 48
            Industrial Laboratories
        Chemistry - Methacrylic Acid, Esters,
                                Detection of

"Polarographic Method of Determining Methacrylic
Ester," M. B. Neyman, M. A. Shubenko, Chem Inst,
Gor'kiy State U, 3 pp

"Zavod Lab" Vol XIV, No 4

Methyl ester of   methacrylic acid is used in
plastic manufacture. Describes method of de-
termining it in solutions on LiCl or $(CH_3)_4NI$ back-
ground. Strength of diffusion current is pro-
portional to concentration. Polymerization can be
studied by same method.
                                        4/49T24

SHUBENKO, M. A.

USSR/Chemistry - Photochemistry   Aug 49
              Iodides

"Photoreactions of Iodoorganic Compounds," G. A. Razuvsyev, M. A. Shubenko, Gor'kiy State U, 4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6 -pp.1049-52.

Tabular outlines of the patterns of the reactions of (1) C_6H_5 with mercury-containing hydrocarbons $(C_6H_5)_2Hg$, $n-(C_6H_4CH_3)_2Hg$, $o-(C_6H_4CH_3)_2Hg$, and $(C_6H_5CH_2)_2Hg$ in C_6H_6, CH_3OH, C_2H_5OH, and $CH_3-CHOH-CH_3$, (2) C_6H_5I with $(C_6H_5)_2Sb$ in CH_3OH, C_6H_6, and $CHCl_3$ (3) C_6H_5 CH_2I with $(C_6H_5)_2Hg$ in CH_3OH, and C_6H_6, and with $o-(C_6H_4CH_3)_2Hg$ in CH_3OH, and (4) CH_3I with $(C_6H_5CH_2)_2Hg$, $(C_6H_5)_3Sb$, and $(C_6H_5)_2Hg$ in CH_3OH and C_6H_6. Submitted by Acad A. N Nesmeyanov 3 Jun 49.

PA 1/50T16

Photoreactions of iodoörganic compounds. G. A. Razuvaev and M. A. Shubenko (Gorki State Univ.). Zhur. Obshchel Khim. (J. Gen. Chem.) 20, 175–80(1950); cf. C. A. 44, 1415x. Irradiation of 2 g. PhₐHg and 1.1 g. PhI in 20 ml. C₆H₆ 60 hrs. in a quartz vessel gave 70% PhHgI, m. 276°, 0.05 g. Ph₂, and 20% PhₐHg. Similar reaction of 1.75 g. (p-MeC₆H₄)₂Hg, 0.9 g. PhI, and 20 ml. C₆H₆ gave 1.1 g. p-MeC₆H₄HgI (74%), m. 218–19°, 0.2 g. Ph₂, and 0.1 g. (p-MeC₆H₄)₂, identified by decarboxylation to Ph₂ after oxidation with KMnO₄. A 24-hr. irradiation of 2 g. Ph₂Hg and 1.2 g. PhI in 20 ml. MeOH gave 1.9 g. PhHgI and 0.1 ml. C₆H₆, as well as an unstated amt. of CH₂O. A similar reaction in EtOH gave 73% PhHgI, C₆H₆ (isolated as 0.25 g. m-dinitro deriv.), and AcH; in iso-PrOH the reaction gave 100% PhHgI, C₆H₆,

and Me₂CO. (o-MeC₆H₄)₂Hg (2 g.), 1.2 g. PhI, and 20 ml. MeOH gave in 60 hrs. 15% (o-MeC₆H₄)₂Hg, a trace of HgI₂, 73%, o-MeC₆H₄HgI, m. 257°, CH₂O, C₆H₆, and an unstated amt. of MePh. Ph₂Hg (2 g.), 1.2 g. Ph-CH₂I, and 25 ml. MeOH gave in 80 hrs. 88% PhHgI, 0.17 g. unreacted R₂Hg, 45% C₆H₆, CH₂O (0.05 g. polarographically), and 95% (PhCH₂)₂. A similar reaction with PhCH₂Cl in 80 hrs. gave 84% PhHgCl, 31% C₆H₆, CH₂O, 50% (PhCH₂)₂, and 16% unreacted R₂Hg. (o-MeC₆H₄)₂Hg (2 g.) and 1.1 g. PhCH₂I in MeOH gave in 60 hrs. 7% unreacted R₂Hg, 80% o-MeC₆H₄HgI, 0.3 ml. PhMe, and 0.21 g. (PhCH₂)₂. Ph₂Hg (2 g.) and 1.2 g. PhCH₂I in C₆H₆ in 80 hrs. gave 70% PhHgI, 23% PhCH₂, 0.2 g. Ph₂, and an unstated amt. of (PhCH₂)₂.

G. M. Kosolapoff

M. A. SHUBENKO   Nov 51

USSR/Chemistry - Organic Antimony and
                 Mercury Compounds

"Photoreactions of Iodoorganic Compounds, " G. A. Razuvayev, M. A. Shubenko, Gor'kiy State U
"Zhur Obshch Khim" Vol XXI, No 11, pp 1974-1979

Conducted following photoreactions: Bz_2Hg and Me_2Hg with C_6H_6I and Bz_2Hg with MeI in MeOH
and C_6H_6 solns; Et_2Hg with C_6H_6I, and Ph_3Sb with C_6H_6I in MeOH, C_6H_6, and $CHCl_3$, solns,
Described respective reaction products. Proposes mechanism of all reactions, based on
photolysis of org I compds into at I and free radical; studies their behavior further.

PA 194T45

SHUBENKO, M. A.

CZECH

Photoreactions of iodo-organic compounds with substituents in the nucleus. M. A. Shubenko (State Univ., Gorki). Sbornik Statei Obshchei Khim. 2, 1015-8 (1953); cf. C.A. 44, 6832h.—Ultraviolet irradiation of 1.3 g. Ph₃Hg and 0.9 g. o-O₂NC₆H₄I in EtOH 60 hrs. gave 60% PhHgI, m. 274°, a small amt. of C₆H₆, and AcH. Similarly, 1.4 g. Ph₃Hg and 1 g. p-IC₆H₄Ac in EtOH gave 62% PhHgI, a little C₆H₆, and AcPh; along with traces of AcH. Irradiation of 1.5 g. Ph₃Sb and 1.0 g. p-IC₆H₄OMe in MeOH 40 hrs. gave a little MeOPh, 43% Ph₃Sb(OH)₂, m. 205–6°, and CH₂O. The use of Ph₃Hg in the above reaction gave 88% PhHgI, C₆H₆, PhOMe, and CH₂O. Introduction of MeO group labilizes the radical cleavage of the p-iodo atom. G. M. K.

SHUBENKO, M. A.

Photoreactions of Organic Iodine Compounds Having Substituents in the Ring,
page 1043, Sbornik statey po obshchey khimii (Collection of Papers on General
Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

Gor'kiy State U

SHUBENKO, M.A.

Exchange reactions during thermo- and photodissociation of organometallic compounds. G. A. Razuvaev, G. G. Petukhov, M. A. Shubenko, and V. A. Voitovich (State Univ., Gorki). *Khim. Zhur.* 22, 45–7(1956)(in Russian).—The following results were obtained for reactions involving the H exchange between the solvent and the products of the decompn. of organometallic compds. [expt. no., starting compd., solvent, D content in solvent (γ), isolated product, and D content in product (γ) given]: 1, Ph_2Hg (I), C_6D_6 (II), 3800, Ph_2, 542; 2, PhHgOH, II, 250, Ph_2, 120; 3, Ph_4P, II, 3200, Ph_2, 295; 4, $(PhCH_2)Hg$, C_6D_5Me, 1808, $(PhCH_2)_2$, 12; 5, $PhCH_2I$, C_6D_5Me, 781, $(PhCH_2)_2$, 167; 6, I + Na, II, 912, BzOH, 338; 7, I + Na, II, 3200, BzOH, 2668; 8, $(PhCH_2)_2Hg$ + Na, C_6D_5Me, 1218, $PhCH_2CO_2H$, 424; 9, PhMgBr, II, 093, BzOH, 70; 10, PhBr + Na, II, 3200, Ph_2, 38; 11, PhBr + Na, II, 3200, Ph_2, 294; 12, $PhCH_2Br$ + Na, C_6D_5Me, 418, $(PhCH_3)_2$, 56. In expts. 1, 2, 4, and 5, a sample (5 g.) of the starting compd. in 15 ml. solvent in a quartz test tube was irradiated with ultraviolet lamp (PRK-2). Sample 5, in addn., contained 3 g. freshly pptd. Cu. In expt. 3, the reactants were kept at 80°. In expts. 6, 7, and 8, carried out in N, 3–4 g. Na and later an excess of Dry Ice were added to a sample (5 g.) of the organometallic compd. To the soln. of PhMgBr (expt. 9) in 15 ml. C_6D_6 was added an excess of Dry Ice. The mixt. of PhBr (15 g.) in 8 g. solvent (expt. 10) contained 3 g. Na. In expt. 11 to 8 g. C_6D_6 contg. 3 g. Na was added dropwise 15 g. PhBr and in the analogous expt. 12, 10 g. C_6D_5Me and 3 g. Na was slowly mixed with 16 g. $PhCH_2Br$. In every instance a 2-hr. reaction time was sufficient to reach an equil. The av. error was ±15%.   A. R. Kotlobv

RAZUVAYEV, G.A.; PETUKHOV, G.G.; KUDRYAVTSEV, L.F.; SHUBENKO, M.A.

Reaction of diphenylmercury with toluene. Zhur. ob. khim. 33
no.8:2764-2766 Ag '63.   (MIRA 16:11)

SHUBENKO, V.A., doktor tekhn.nauk, prof.; BRASLAVSKIY, I.Ya., inzh.; KUTSIN, V.V., inzh.

High-speed d.c. drive using p-n-p-n devices regulated by a digital servo system. Elektrichestvo no.9:31-35 S '65.

(MIRA 18:10)

1. Ural'skiy politekhnicheskiy institut im. Kirova.

SHUBENKO, V.A., doktor tekhn,nauk, prof.; SHREYNER, R.T., inzn.; LIKHOSHERST,
V.I., inzh.

Construction of converters for frequency speed regulation of electric
drives. Elektrotekhnika 36 no.10:23-26 O '65.

(MIRA 18:10)

SHUBENKO, V. A.

"Industrial Applications of Ionic Drives," reported in the article "First All-Union
Scientific and Technical Session on Mercury-Arc Rectifiers," Elektrichestvo, No. 11, 1949.

Candidate of Technical Sciences, of UPI (Ural Polytechnic Institute imeni Kirov

Abstract W-9395, 10 Apr 1950,

SHUBENKO, V.A., dotsent, kandidat tekhnicheskikh nauk.

Optimum slip conditions and minimum load losses of motors used in
drives operating under abruptly varying loads. Trudy Ural.politekh.
inst. no.45:181-191 '53.   (MLRA 9:11)
     (Electric motors, Induction) (Electric driving)

SHUBENKO V. A.

621.316.718 : 621.34

4607. Limits of the speed control of an electric drive of the generator-motor type. V. A. SHUBENKO AND V. G. SOZONOY. *Elektrichestvo*, 1964, 37-40. *In Russian*,

The effect of the coefficient of relative rigidity of the mechanical characteristic on the speed control range of various types of generator-motor speed control range of various types of generator-motor speed control systems is considered. These systems work either with voltage feedback or with speed feedback by means of a tachometer generator. The amplifier in the latter case takes the form of an exciter connected in series with the reference voltage to the armature of the tachometer generator. It is shown that the coefficient of relative rigidity is useful for determining not only the limits of the speed regulation range, but also other parameters of the speed control system.

B. F. KRAUS

112-2-4296

TRANSLATION FROM: Referativnyy zhurnal, Elektrotekhnika, 1957,
                  Nr 2, p. 250 (USSR)

AUTHOR: Shubenko, V. A.

TITLE: The Effect of Flashover on the Effective Current Value
            in Electric Rectifier Networks (Vliyaniye perekrytiya
            na deystvuyushcheye znacheniye toka v elektricheskikh
            tsepyakh s ventilyami)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1956, Nr 82, pp. 77-81

ABSTRACT: A formula has been derived for determining the exact ef-
            fective value of the current I_2 flowing through the rectifiers.
            This formula is applicable to the Larionov circuit when the
            resistance of the transformer windings and the voltage drop in
            the rectifiers is neglected. In addition to this it is assumed
            that an infinite inductance is connected into the rectified
            current circuit. The following formula was obtained from the

Card 1/2

The Effect of Flashover on the Effective Current Value (Cont.)

calculations made:

$$I_2 = I_g \sqrt{\frac{1}{2\pi} \; \frac{2\gamma - 2\sin\gamma + \cos(2 + \gamma)\,(\gamma\cos\gamma - \sin\gamma)}{[\cos\alpha - \cos(\alpha - \gamma)]^2} + \frac{2\pi}{3} - \gamma }$$

where I_g is the average rectified current; γ is the commutation angle; α is the firing angle. This expression can be simplified by making the assumption that the current varies linearly during commutation. Then

$$I_2 = I_g \sqrt{\frac{1}{3} - \frac{\gamma}{6\pi}} .$$ A comparable calcula-

tion, made for the same conditions when determining I_2 without taking into account the commutation process, gave an error of 3 per cent, and when commutation was taken into account in accordance with the suggested formula, of 1 per cent. Reviewer's remark: This study should be considered as a special case, since a detailed expression had already been obtained in a general form (see Shilling V.: Rectifier Circuits, Inverters and Frequency Converters (Skhemy vypryamiteley, invertorov i preobrazovateley chastoty) Gosenergoizdat, 1950).

M.A.Kh.

Card 2/2

137-58-4-6545

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 32 (USSR)

AUTHOR: Shubenko, V. A.

TITLE: The Present State and Development Trends of the Automation
            of Power Transmission and Distribution and the Automation of
            Technological Processes in Ferrous Metallurgy (Sostoyaniye
            i perspektivy razvitiya avtomatizirovannogo elektroprivoda i
            avtomatizatsii tekhnologicheskikh protsessov v chernoy metal-
            lurgii)

PERIODICAL: V sb.: Materialy konferentsii-kursov po elektroprivodu i
            avtomatiz. tekhnol. protsessov metallurg. predpriyatiy.
            Sverdlovsk, Metallurgizdat, 1957, pp 5-26

ABSTRACT: It is indicated that ferrous metallurgy (FM) is one of the
            largest consumers of electric energy and that motive power
            consumes more than 70% of the electric energy consumed by
            FM. Basic trends in the development of the automation of elec-
            tric power transmission and distribution (PT&D) are formu-
            lated. An evaluation of the state of PT&D in relation to its auto-
            mation, also of the automation of electrified process units and
Card 1/2   of the basic FM production units (blast-furnace, open-hearth

137-58-4-6545

The Present State and Development (cont.)

furnace, and rolling-mill). Specific examples of the automation of PT&D,
as developed and accomplished by various organizations and establishments,
are examined.

M. L.

1. Metallurgy   2. Industrial plants--Automation

Card 2/2

SHUBENKO, V.A.; KAROCHKIN, A.V.

Effect of transient commutation processes on the behavior of
dynamic drag in induction motors with a short-circuit rotor. Izv.
vys. ucheb. zav.; elektromekh. 1 no.4:27-34 '58.   (MIRA 11:8)
    (Electric motors, Induction)

SHUBENKO, V.A.

AUTHORS: Shubenko, V. A., Docent, Candidate of Technical 105-58-4-10/37
               Sciences, Sozonov, V. G., Docent, Candidate of
               Technical Sciences

TITLE: Series Wound Motor Characteristics for Dynamic Braking
               With Self Excitation (Kharakteristiki dvigatelya
               posledovatel'nogo vozbuzhdeniya v rezhimakh dinamicheskogo
               tormozheniya s samovozbuzhdeniyem)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 48-50 (USSR)

ABSTRACT: A simple method for the construction of the characteristics
               taking into account the shape of magnetization curve and the
               magnitude of the residual magnetism is given. When using
               the transition characteristics
               $\frac{E}{n} = f(I_{excitation})$ this method coincides with that of
               reference 2. In order to obtain the characteristics $n = f(I)$ in the case of self excitation of the motor it is
               necessary to enter the magnetization curve of the motor
               $E_o = f(I_{excitation})$ (taken at a certain speed of revolution).
Card 1/2   In equal coordinate axes the self excitation circuit

Series Wound Motor Characteristics for Dynamic Braking   105-58-4-10/37
With Self Excitation

$I(R_a + R_c + R_{dt})$ is constructed. (The motor excitation
being connected in series with the rotor through the
resistance R_{dt} serving as limit for the current I). The
intersection of both characteristics determines the electro-
motive force up to which the machine will be excited with
the resistance of the outer circuit R_{dt} and n_0. The analysis
of the characteristics obtained with different values of
the residual magnetism shows that the residual magnetism
in braking exerts a favorable influence on the current
diagram. A motor with saturated magnetic circuit has a more
favorable braking characteristic than that with unsaturated
magnetic circuit. In all cases possible in practice the
brake effect occurs without exception till a speed of zero.
This is explained by the fact that the magnitude of the
residual magnetism in the equipment is not equal to zero.
There are 4 figures and 3 references, 3 of which are Soviet.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. Kirova (Ural
                 Polytechnical Institute imeni Kirov)
SUBMITTED: June 27, 1957
AVAILABLE: Library of Congress
Card 2/2
                 1. Dynamic braking-Characteristics   2. Electric motors-Applications

SHUBENKO, V.A., kand. tekhn. nauk, dots.

Application of a simplified universal circular diagram to the
approximate calculation of electromechanical transient processes in
asynchronous motors. Trudy Ural. politekh. inst. no.90:146-156
'58.   (MIRA 13:2)
                    (Electric motors, Induction)

SHUBENKO, V.A., kand. tekhn. nauk, dots.

Approximate methods for evaluating the effect of the acceleration of the rotor of an asynchronous motor on the electromagnetic torque developed by it. Trudy Ural. politekh. inst. no.90:157-166 '58.

(MIRA 13:2)

(Electric motors, Induction)

14(1)   SOV/67-59-5-11/30
AUTHORS: Shubenko, V. A., Candidate of Technical Sciences, Karochkin,
                A. V., Engineer

TITLE: On the Protection of Engines Driven by Compressed Gas Against
                Acceleration

PERIODICAL: Kislorod, 1959, Nr 5, pp 38-40 (USSR)

ABSTRACT: The work of engines driven by compressed gas is in most cases
                transformed into electric energy by means of an asynchronous
                generator which is connected in parallel with the alternating-
                current system of the department. It is used in starting as the
                motor which accelerates the engine driven by compressed gas until
                the working speed is reached. The mechanical characteristics of
                the asynchronous generator are given in figure 1. The braking
                couple of the generator during operation is at all times equal
                to the torque of the engine driven by compressed gas. In the
                case of turbo-engines driven by compressed gas working at a
                very high speed, a gear reduction is used with the generator.
                When the generator is not energized there follows, therefore, a
                dangerous increase in the speed of the engine driven by compres-
Card 1/2   sed air. In the case of turbo-engines driven by compressed gas

SOV/67-59-5-11/30

On the Protection of Engines Driven by Compressed Gas Against Acceleration

of plants type KT-3600 the speed increases by 900 revolutions per minute. A method preventing this acceleration is urgently needed. The answer to the problem is an automatic device. Additional braking devices acting upon the flywheel axis of the engine driven by compressed gas are extensively used, or the gas intake of the engine driven by compressed gas is shut off. Figure 2 shows the scheme of a device of the latter kind. Its disadvantage lies in the fact that the stop valve freezes easily. A new method is based on the use of a condenser for the braking of the asynchronous generator (V. P. Andreyev, Yu. T. Sabinin, Footnote 1). The braking couple of the condenser is in this case balanced by the torque of the engine driven by compressed gas. The new device was tested by means of laboratory models as well as industrially in the Nizhne-Tagil'skiy metallurgicheskiy Kombinat (Nizhniy Tagil' Metallurgical Kombinat). Figure 5 demonstrates the braking power of the condenser. There are 5 figures and 1 Soviet reference.

Card 2/2

KAROCHKIN, A.V., SHUBENKO, V.A.

Transient electromagnetic processes at dynamic braking of asyn-
chronous short-circuited motors. Trudy Ural. politekh. inst.
no.79:118-133 '59.   (MIRA 13:7)
          (Electric motors, Induction)

Vsesoyuznoye ob"yedinennoye soveshchaniye po avtomatizatsii prolizvodstvennykh protsessov v mashinostroyenii i avtomatizirovannom elektroprivodu v promyshlennosti. 3d, Moscow, 1959

Elektroprivod i avtomatizatsiya promyshlennykh ustanovok; trudy soveshchaniya (Electric Drive and Automation in Industrial Systems; Transactions of the Conference) Moscow, Gosenergoizdat, 1960. 470 p. 11,000 copies printed.

General Eds.: I.I. Petrov, A.A. Sirotin, and M.G. Chilikin; Eds.: I.I. Sud, and E.P. Silayev; Tech. Eds.: K.P. Voronin, and G.Ye. Larionov.

PURPOSE: The collection of reports is intended for the scientific and technical personnel of scientific research institutes, plants and schools of higher education.

COVERAGE: The book is a collection of reports submitted by scientific workers at plants, scientific institutes and schools of higher education at the third joint All-Union Conference on the Automation of Industrial Processes in Machine Building and Automated Electric Drives in Industry held in Moscow on May 12-16, 1959. The Conference was called by the Academy of Sciences USSR, the Gosplan SSSR (State Planning Commission USSR), the GNTK SSSR, the Gosudarstvennyy komitet po avtomatizatsii i mashinostroyeniyu (State Committee on Automation and Machine Building) and the Natsional'nyy komitet SSSR po avtomaticheskomu upravleniyu (USSR National Committee on Automatic Controls) and prepared by the Nauchno-tekhnicheskiy komitet po avtomatizirovannomu elektroprivodu (Scientific and Technical Committee on Automated Electric Drives), the MEI (Moscow Institute of Energetics), the VNIIEM, the IAT (Institute of Automation and Telemechanics) of the Academy of Sciences USSR, and the Komissiya po tekhnologii mashinostroyeniya Instituta mashinovedeniya, AN SSSR (Commission on the Technology of Machine Building of the Institute of Science of Machines of the Academy of Sciences USSR). It was the purpose of the Editorial board to arrange the reports in a way which would ensure a relatively systematic presentation of theoretical and practical problems relating to electric drives and automatic controls of industrial mechanisms used in various branches of industry. Basic problems of automated electric drive and their solution are outlined. The book also contains articles on electric machinery and means of automation. Considerable attention is paid to non-contact automatic control systems, including systems with semiconductor devices and magnetic amplifiers, and to computers intended both for the analysis and the synthesis of linear and nonlinear automatic regulation and control systems. Reports already published in journals or official publications have been considerably abbreviated; those which have appeared in volume V of NII EP transactions or in the journal "Elektrichestvo" are marked with an asterisk. No personalities are mentioned. References accompany some of the papers.

PART I. GENERAL PROBLEMS CONCERNING THE THEORY AND
PRACTICE OF ELECTRIC DRIVE AND AUTOMATICS OF CONTROL

Lerner, B.M., Doctor of Technical Sciences, T.G. Sopkar, Professor, Doctor of Technical Sciences, Yu.I. Konygin, and Yu.B. Plamodyalo, Engineers. Automation of the Calculations of Electric Drives by Means of Electronic Digital Computers*   43

Baltrushevich, A.V., Engineer. Stability of One Type of Digital Servo-systems   44

Barmol'd, Yu.B., Engineer. Investigation of the Dynamic Properties of a Motor-Generator System by the Method of Experimental Frequency-Response Characteristics   45

Shubenko, V.A., Candidate of Technical Sciences, Docent. Transient Electromagnetic Phenomena in Induction Motors and Their Effect on the Dynamics and Operational Reliability of Automated Electric Drives   34

Suvorov, G.V., Engineer. Graphic Method of Designing Transient Processes in an Automatic Regulation System   33

Shryfman, B.M., Engineer. Determining Amplitude-Phase Characteristics of an Automated Electric Drive on the Basis of Transient Functions   66

Ladymov, Ia.B., Candidate of Technical Sciences. Problems of Electric Drives of Mechanisms Containing Links With Distributed Parameters   72

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Radchenko, L.A., Candidate of Technical Sciences, Docent. Dynamics of Induction Electric Drives Controlled According to V.S. Kulebakin's Scheme   75

Drobyazko, S.F., Candidate of Technical Sciences. Absorbing Brake Equilibrium in Electric Drives With Individual Generating Sets   76

Masharin, A.V., Professor, Doctor of Technical Sciences. Graphic Method of Synthesis of Electric-Drive Automatic-Control Systems   77

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KHU TSZYA-YAO, [Hu Chia-yao], aspirant; SHUBENKO, Vitaliy Aleksandrovich,
        kand.tekhn.nauk, dotsent

        Transient process in a rectifying network with a resistance
        preceding the inductive load. Izv.vys.ucheb.zav.; elektromekh.
        3 no.5:77-86 '60.   (MIRA 13:7)

        1. Kafedra elektrifikatsii promyshlennykh predpriyatiy
        Ural'skogo politekhnicheskogo instituta.
                (Electric current rectifiers)

31504

S/105/60/000/010/003/004
B116/B206

$9,2530$

AUTHORS: Hu Chia-yao, Engineer, and Shubenko, V. A., Candidate of
            Technical Sciences, Docent

TITLE: Transients in magnetic amplifiers with an active and induc-
            tive load in the rectified circuit

PERIODICAL: Elektrichestvo, no. 10, 1960, 35 - 41

TEXT: In the magnetic amplifiers with active and inductive load in the
rectified circuit, a dynamic redistribution of the voltage takes place
during the transient. In a number of cases this exerts a great effect on
the course of the transients. In this connection studies are mentioned
by L. A. Bessonov (Ref. 1: Avtokolebaniya v elektricheskikh tsepyakh so
stal'yu (Self-oscillations in electric circuits with steel), Gosenergoizdat,
1958) and L. V. Safris (Ref. 2: K voprosu o perekhodnykh protsessakh v
magnitnykh usilitelyakh s induktivnoy nagruzkoy, vklyuchennoy cherez
vypryamitel' (Problem of transients in magnetic amplifiers with inductive
load which is connected via a rectifier) "Avtomatika i telemekhanika",
1958, no. 3). The studies conducted by the two authors (Ref. 3:

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31504

S/105/60/000/010/003/004
B116/B206

Transients in magnetic...

Perekhodnyye protsessy v vypryamitel'noy tsepi s aktivno-induktivnoy
nagruzkoy i predvklyuchennym soprotivleniyem (Transients in the rectifier
circuit with active and inductive load and a resistance connected in series,
"Elektromekhanika", 1960, no. 5) showed that the dynamic redistribution of
the voltages is inherent to every rectifier circuit and caused by a resist-
ance connected in series. The authors give a general method for calcula-
ting the transients in magnetic amplifiers, which makes it possible to
consider the effect of dynamic redistribution, the feedback and nonlinear-
ity of the circuits. A case without a feedback is investigated first
(Fig. 1). It is shown that the dynamic redistribution of the voltages
leads to a reduction of the equivalent time constant τ'_{load} of the load

circuit, and the weaker the magnetic biasing, the more essential is the
effect of the redistribution on the transient in the magnetic amplifier.
This effect can be neglected in the case of strong magnetic biasing. It
is pointed out that the redistribution also affects the secondary circuits,
but this effect can be neglected in a number of cases. A case with exter-
nal feedback (Fig. 3) is investigated next. It is pointed out that data
obtained by experiment and calculation make it possible to use simplified

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B116/B206

Transients in magnetic...

equations in practice. Such equations are based on the assumption that
the magnetic amplifier operates with a weak signal and all its parameters
are constant. Generally, it operates in the nonlinear sections of the
characteristics, and the time constant τ_o and k_I change during the tran-
sient. $k_I = \Delta I_{load}/\Delta I_{control}$. The nonlinear characteristics can be re-
placed by linear sections and the equations are to be solved separately
for each individual section. The following formulas are given for the
case without feedback:

$$\Delta I_{control} = \tau'_{load} \tau_o \frac{d^2 \Delta i_{control}}{dt^2} + (\tau'_{load} + \tau_o)\frac{d\Delta i_{control}}{dt} + \Delta i_{control} \quad (28)$$

$$\Delta I_{load} = \tau'_{load} \tau_o \frac{d^2 \Delta i_{load}}{dt^2} + (\tau'_{load} + \tau_o)\frac{d\Delta i_{load}}{dt} + \Delta i_{load} \quad (29)$$

and for the case with feedback:

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B116/B206

Transients in magnetic...

$$I_{control} = \tau'_{load} \tau_{o(feedback)k} \frac{d^2 i_{control\ k}}{dt^2} + (\tau'_{load} + \tau_{o(feedback)k})$$

$$\times \frac{di_{control\ k}}{dt} + i_{control\ k} \qquad\qquad (30a)$$

$$I_{load\ k} = I_{load\ xk} + k_{Iw(feedback)k} I_{control} w_{control} = \tau'_{load} \tau_{o(feedback)k}$$

$$\times \frac{d^2 i_{load\ k}}{dt^2} + (\tau'_{load} + \tau_{o(feedback)k}) \frac{di_{load\ k}}{dt} + i_{load\ k} \qquad (31a),$$

$$\text{where } \tau_{o(feedback)} = \tau_o (1 + k_{Ifeedback} \frac{w_{feedback}}{w_{control}}) = \tau_o \frac{k_{Ifeedback}}{k_I} \qquad (32)$$

The index k denotes the values of the kth section. From the character-

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31504   S/105/60/000/010/003/004

Transients in magnetic...   B116/3206

istics $\bar{p}_o = f(\Sigma I_o w_o E_{mean})$ and $E_{mean} = f(\Sigma I_o w_o)$, where $\bar{p}_o$ is the

constant magnetic fluxcomponent, τ_{ok} can be determined graphically

according to M. A. Rozenblat (Ref. 5: Magnitnyye usiliteli (Magnetic ampli-

fier). Izd. "Sovetskoye radio", 1956), and the value of $k_{Iw(feedback)k}$

from the load characteristic $I_{load} = f(I_{control} w_{control} + I_{displacement}$

$w_{displacement})$. The transients were investigated here during connection

of the control circuit. Transients during the disconnection of the con-

trol circuit are dealt with next, i. e. the case without feedback and

without bias circuit. It is shown that in this case the transient con-

sists of two stages, but the second stage can be neglected in practical

calculations. In this case, the transient i_{load} can be approximately

calculated from

$$i_{load} = I_{(t=0)} e^{-t/\tau_{load}} \tag{44}$$

Calculation- and experimental results were compared with each other in

order to check the method shown here. The comparison showed that this
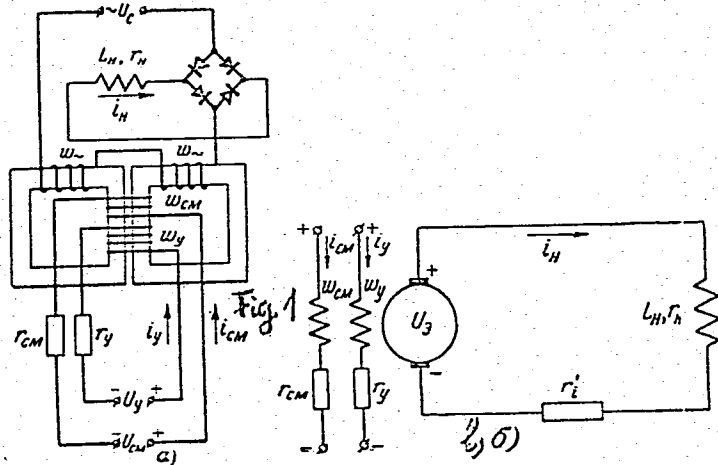
Card 5/7

33504   S/105/60/000/010/003/004
           B116/3206

Transients in magnetic...

method is sufficiently accurate for all cases investigated here. The main
results obtained can also be applied to magnetic amplifiers with compli-
cated circuits. There are 6 figures and 5 Soviet-bloc references.

SUBMITTED: April 9, 1960

Legend to Fig. 1:
Schematic wiring
diagram (a) and
equivalent-cir-
cuit diagram (b)
of a magnetic amplifier
without feedback with
RD-load on the recti-
fied circuit. The
indices are: H load,
CM displacement-,
y control, 3 equiva-
lent.

Card 6/7

KAROCHKIN, A.V., insh.; SHUBENKO, V.A., dotsent, kand.tekhn.nauk;
GLUSHKOV, L.A., inzh.

High-speed automatic control of dynamic braking of asynchronous
three-phase servomotors. Trudy Ural.politekh.inst. no.101:111-115
'60.   (MIRA 14:3)
                    (Electric controllers)

SHUBENKO, V.A., dotsent, kand.tekhn.nauk; IRPICHNIKOV, V.M., aspirant

Device for measuring the level and speed of teeming. Trudy Ural.
politekh.inst. no.101:169-180 '60.   (MIRA 14:3)
                        (Founding)

SHUBENKO, V.A.

Braking of a disconnected short-circuited asynchroncus motor
by means of a three-phase short-circuit of the stator winding
in the presence of an unquenched magnetic field. Trudy Ural.
politekh. inst. no.106:4-27 '60.   (MIRA 15:5)
                    (Electric motors, Induction)

SHUBENKO, V.A.; ZEIKIN, N.I.; KAROCHKIN, A.V.

Problem concerning the effect of electromagnetic transients
on the principles of the design of automatic control networks
for short-circuited asynchronous motors. Trudy Ural. politekh.
inst. no.106:28-42 '60.   (MIRA 15:5)
                    (Electric motors, Induction)

SHUBENKO, V.A.; KIRPICHNIKOV, V.M.; TOMASHEVSKIY, N.I.

Automated a.c. servomotor with impulse speed control for the
order system of automatic compensators and bridges. Trudy Ural.
politekh. inst. no.106:116-121 '60.   (MIRA 15:5)
                    (Servomechanisms)
                   (Metallurgical plants)

SHUBENKO, V.A.; USTELEMOV, V.N.

Devices for measuring the pressure exerted by the metal on the
rollers in rolling operations. Trudy Ural. politekh. inst.
no.106:137-144 '60.   (MIRA 15:5)
             (Rolling mills—Electronic equipment)
                     (Electronic measurements)

S/194/62/000/001/014/066
D201/D305

16.8000

AUTHORS: Shubenko, V. A. and Kirpichnikov, V. M.

TITLE: Self-rectifying feedback amplifier working into the
             control winding of a capacitor miniature motor

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
             no. 1, 1962, abstract 1-2-21zh (Izv. vyssh. uchebn.,
             zavedeniy. gorn. zh., 1961, no. 4, 137-145)

TEXT: The circuit of a self-rectifying amplifier with a frequen-
cy-dependent feedback is suggested. The circuit improves the har-
monic content of the input current and the static properties of
the electronic-amplifier-motor system. The feedback improves the
operation speed of the auto-compensator since the revolution speed
of the motor increases for the same time constants of the self-
control system. The theoretical aspect of self-rectifying a.c. am-
plifiers with RC differentiating network feedbacks is considered.
The mechanical characteristics of an ideal motor in an electronic-
amplifier-motor system are given. Electric circuits of the ampli-

Card 1/2

Self-rectifying feedback ...

S/194/62/000/001/014/056
D201/D305

fier, graphs and oscillograms showing the operation of separate
amplifier elements are given. 5 figures. 8 references. / Abstrac-
ter's note: Complete translation. /

Card 2/2

SHUBENKO, V. A., kand. tekhn. nauk; ZENKIN, N. I., inzh.; KIRPICHNIKOV, V. M., inzh.; AGAFONOV, Yu. P., inzh.

Some problems in the study of transient phenomena in asynchro-
nous motors. Izv. vys. ucheb. zav.: gor. zhur. no.10:125-137
'61.
                              (MIRA 15:10)

1. Ural'skiy politekhnicheskiy institut imeni S. M. Kirova
(for Shubenko, Zenkin, Kirpichnikov). 2. Kurganskiy mashino-
stroitel'nyy institut (for Agafonov). Rekomendovana kafedroy
elektrifikatsii promyshlennykh predpriyatiy Ural'skogo poli-
tekhnicheskogo instituta.

        (Electric motors, Induction)
        (Automatic control)

SHUBENKO, V.A.; KAROCHKIN, A.V.

Selecting the method of automatic switching-in of loads for
expanders after the asynchronous generators driven by
them ar disconnected. Prom.energ. 17 no.1:16-19 Ja '62.
(MIRA 14:12)

(Electric generators)
(Gas and oil engines)

SHUBENKO, Vitaliy Aleksandrovich, kand.tekhn.nauk, prof.; AGAFONOV, Yuriy Petrovich, starshiy prepodavatel'

Characteristic speed zones in impulse control of asynchronous motors.
Izv. vys. ucheb. zav.; elektromekh. 5 no.12:1345-1354 '62.
(MIRA 16:6)

1. Zaveduyushchiy kafedroy elektrifikatsii promyshlennykh
predpriyatiy Ural'skogo politekhnicheskogo instituta (for Shubenko).
2. Kafedra energetiki Kurganskogo mashinostroitel'nogo instituta (for
Agafonov).
(Electric motors, Induction) (Automatic control)

SHUBENKO, V.A.; KIRPICHNIKOV, V.M.

    General method for mathematical study of a.c. servo-drive
    amplifiers. Trudy Ural. politekh. inst. no.124:70-80 '62.
                                      (MIRA 16:8)

SHUBENKO, Vitaliy Aleksandrovich, dr. tekhn. nauk, prof.; AGAFONOV, Yuriy
Petrovich, kand. tekhn. nauk

Effect of initial conditions on the nature of pulsed control
of asynchronous chort-circuited motors. Izv. vys. ucheb. zav.
elektromekh. 7 no.4:479-490 '64   (MIRA 17:7)

1. Zaveduyushchiy kafedroy elektroprivoda i avtomatizatsii pro-
myshlennykh ustanovok Ural'skogo politekhnicheskogo instituta
(for Shubenko). 2. Zav. kafedroy energetiki Kurganskogo mashi-
nostroitel'nogo instituta (for Agafonov).

SHUBENKO, V.A., doktor tekhn. nauk, prof.; BRASLAVSKIY, I.Ya., inzh.

A.C. servo drive with contactless digital program control. Izv.
vys. ucheb. zav.; energ. 7 no.9:15-21 S '64.   (MIRA 17:11)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova. Pred-
stavlena kafedroy elektroprivoda i avtomatizatsii promyshlennykh
ustanovok.

SHUBENKO, V.A., prof.; BRASLAVSKIY, I.Ya., inzh.

Using asynchronous motors in servo systems with digital programmed
control. Izv. vys. ucheb. zav.; gor. zhur. 7 no.5:125-130 '64.
(MIRA 17:12)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.
Rekomendovana kafedroy elektroprivoda i avtomatizatsii promysh-
lennykh ustanovok.

KIRPICHNIKOV, V.M., dotsent; SHUBENKO, V.A., prof.

Circular diagram and parameters of the equivalent circuit of a capacitor micrometer. Izv.vys.ucheb.zav.;gor.zhur. 7 no.6:118-123 '64.
(MIRA 17:12)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova. Rekomendovana kafedroy elektroprivoda i avtomatizatsii promyshlennykh ustanovok.

SHUBENKO, V.A., prof.; BRASLAVSKIY, I.Ya., inzh.

Investigating the performance of an induction motor with a
p-n-p-n device in the power circuit controlled by a digital
servosystem. Izv. vys. ucheb. zav.; gor. zhur. 7 no.11:161-
166 '64.   (MIRA 18:3)

1. Ural'skiy politekhnicheskiy institut imeni Kirova. Rekomen-
dovana kafedroy elektroprivoda i avtomatizatsii promyshlennykh
ustanovok.

L 22427-66   EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)   IJP(c)   BC

ACC NR: AP6013620   SOURCE CODE: UR/0105/65/000/009/0031/0035

AUTHOR: Shubenko, V. A. (Doctor of technical sciences; Professor); Braslavskiy, I. Ya. (Engineer); Kutsin, V. V. (Engineer)

ORG: Ural Polytechnic Institute im. Kirov (Ural'skiy politekhnicheskiy institut)

TITLE: High-speed AC thyristor power drive controlled by a digital servosystem

SOURCE: Elektrichestvo, no. 9, 1965, 31-35

TOPIC TAGS: digital system, servosystem, alternating current, electric motor, automatic control system

ABSTRACT: The authors describe power-drive systems in which the motor controls (thyristors) perform the following functions in accordance with signals received from the controlling digital servosystem: startup of motor in the required direction;   reduction of motor RPM, disconnection of motor following completion of the program. To this end, the digital servosystem (DSS) is equipped with an arithmetic device fed with a binary-coded program as well as with a nine-digit static-type adder, code-to-voltage converters, and transistorized static-type AND, OR, NOT logic elements. Experiments demonstrate the feasibility and expediency of utilizing thyristors in the power circuits of the induction motor, particularly when these are controlled from the DSS.

Card 1/2   UDC: 621.34:62-503.53

L 22427-66

ACC NR: AP6013620

This makes the control system virtually inertia-free and assures the performance
of the electric drive in regimes which make possible a rapid and exact execution
of the present programs. Orig. art. has: 5 figures and 3 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: 25May64 / ORIG REF: 006

Card 2/2

SHUBENKO, V.A., prof.; BRAHAVSKIY, I.Ya., inzh.; GIL'DEBRAND, A.D., inzh.

Design of an a.c. servo drive optimum in respect to response and accuracy with digital program control. Izv. vys. ucheb. zav.; gor. zhur. 8 no.2:128-135 '65.   (MIRA 18:5)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.

ZENKIN, N.I.,inzh.; KIRPICHNIKOV, V.M., kand.tekhn.nauk; TOMASHEVSKIY, N.I., inzh.; SHUBENKO, V.A., doktor tekhn.nauk; YASENEV, N.D., inzh.

Calculating dynamic and static characteristics of asynchronous motors with the help of analog computers. Izv.vys.ucheb.zav.; gor.zhur. 8 no.11:149-157 '65.

(MIRA 19:1)

Country   : USSR
Category : Cultivated Plants. Cereals. Leguminous Plants.
                                              Tropical Cereals.   M

Abs Jour : RZhBiol., No 6, 1959, No 24829

Author   : Shubenko, V. S.
Inst   : Khar'kov Agricultural Institute.
Title   : Pollination Effect from the Different Parts of
             Male Inflorescence on Corn Productivity.
Orig Pub : Zap. Khar'kovsk. s.-kh. in-ta, 1958, 15 (52),
             119-122

Abstract : In the experiment of 1952-1954, plants grown
             from seeds, which had been obtained during polli-
             nation from the central axes of inflorescence
             only (the lateral branchlets receded until afflo-
             rescence), exceeded in bushiness, height, weight
             and length of the spadix, absolute weight and fe-
             cundity those under control - pollination from the
             entire inflorescence. The second generation exhi-

Card   : 1/3

32

Country : USSR
Category : Cultivated Plants. Cereals. Leguminous Plants.
Tropical Cereals.   M

Abs Jour : RZhBiol., No 6, 1959, No 24829

Author :
Inst :
Title :

Orig Pub :

Abstract : bited aftereffects, although in a smaller mea-
sure. Hybrids, obtained by the use of pollen
from the central axes of inflorescence only,
also produced a larger harvest, and the hetero-
zygous drop in F_2 was in smaller degree than in
the control hybrids. The data by Andronescu and
Ovchinnikov that pollen grains from the flowers

Card : 2/3

Country   : USSR
Category : Cultivated Plants. Cereals. Leguminous Plants.
                                    Tropical Cereals.   M

Abs Jour : RZhBiol., No 6, 1959, No 24829

Author   :
Inst   :
Title   :

Orig Pub :

Abstract : of inflorescence's central axis possess the
            greatest average over-all measures were corro-
            borated. -- M. V. Draninshnikov

Card   : 3/3

33

SHUBENKO, V. S.

"The Variability in the Quality of the Sexual Elements and the Development of Corn Hybrids." Cand Agr Sci, Khar'kov Order of Labor Red Banner Agricultural Inst imeni V. V. Dokychayev, Min Higher Education USSR, Khar'kov, 1955. (KL, No 18, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

SHUBENKO-GABUZOVA, I.N.

Congenital diaphragmatic hernias. Pediatriia no.6:83-87 N-D '53.
(MLRA 7:1)

1. Iz prozektury 3-y klinicheskoy bol'nitsy Baku (zaveduyushchiy
I.N.Shubenko-Gabuzova).   (Diaphragm--Hernia)

Shubenko–Gabuzova, I.N.

1332. Hypertension with predominantly pancreatic symptoms. I. N. Shubenko-Gabuzova, *Sovy. Med.*, 1955, 8, 17—21; *Referat. Zh. Biol.*, 1956, Abstr. No. 50851.—The small arteries and arterioles of the pancreas in hypertension are subject to acute spasm, which leads to ischaemia of parts of the gland and necrosis with subsequent scarring. This not infrequently gives the clinical picture of acute pancreatitis, with insufficiency of the internal and external secretions of the gland. Pancreonecrosis can lead to death by acute pancreatitis. (Russian) ——D. H. Smyth.

Dept. Pathologo-anatomy
3rd Clinical Hospital im. Dzhaparidze

SHUBENKO-GABUZOVA, I. N.   Cand Med Sci -- (diss)   "Clinical anatomical

comparisons of the changes in the pancreas during hypertension."   Baku,

1958.   13 pp (Tbilisi State Med Inst), 200 copies   (KL, 13-58, 101)

SHUBENKO-GABUZOVA, I.N.(Baku, ul. Karganova, d.11), GABIBLI, T.D.

Adenocarcinoma of a sebaceous gland. Nov.khir.arkh. no.2:96-98
Mr-Ap '58
(MIRA 11:6)

1. Kafedra gospital'noy khirurgii (zav. - zasluzhennyy deyatel'
nauki prof. M.A.A. Mir-Kasimov) Bakinskogo meditsinskogo instituta
i patologoanatomicheskoye otdeleniye 3-y gorodskoy klinicheskoy
bol'nitsy.
(SEBACEOUS GLANDS--TUMORS)

SHUBENKO,-GABUZOVA, I.N.

Fatal gastrointestinal hemorrhages in hypertension. Sov.med.
22 no.9:121-123 S'58   (MIRA 11:11)

1. Iz patologoanatomicheskogo otdeleniya bol'nitsy imeni
Dzhaparidze (glavnyy vrach I.G. Kadymov), Baku.
            (HYPERTENSION, compl.
                gastrointestinal hemorrh. (Rus))
        (GASTROINTESTINAL SYSTEM, hemorrh.
                in hypertension (Rus))

SHUBENKO-GABUZOVA, I.N.

Malignant leiomyoma of the uterus. Akush.i gin. 34 no.2:92-95
Mr-Ap '58.   (MIRA 11:5)

1. Iz bol'nitsy imeni Dzhaparidze (glavnyy vrach I.G. Kadymov)
        (UTERUS NEOPLASMS, case reports
            leiomyoma (Rus))
        (LEIOMYOMA, case reports
            uterus (Rus))

SHUBENKO-GABUZOVA, I.N.

Thromboembolic disease at the end of pregnancy and after labor; a description of 3 cases. Akush.i gin. 35 no.5:102-103 S-O '59.
(MIRA 13:2)

1. Iz patologoanatomicheskogo otdeleniya 3-y klinicheskoy bol'nitsy imeni Dzhaparidze (glavnyy vrach I.G. Kadymov) g. Baku.
(THROMBOEMBOLISM in pregnancy)
(PREGNANCY, complications)
(PUERPERIUM, complications)

SHUBENKO-GABUZOVA, I.N.

Duodenal ulcer in a 35-day-old child. Pediatriia 37 no.12:56
D '59.   (MIRA 13:5)

1. Iz prozektury 3-y klinicheskoy bol'nitsy g. Baku.
                        (PEPTIC ULCER)

TOPCHIBASHEV, I.M.;   SHUBENKO-GABUZOVA, I.N.

Histological changes in pancreatojejunal anastomosis.
Dokl. AN Azerb. SSR 16 no. 6:597-601 '60.   (MIRA 13:10)

1. Predstavleno akademikom AN Azerbaydzhanskoy SSR.M.A.
Topchibashevym.
            (PANCREAS--DISEASES)   (JEJUNUM--DISEASES)

KAZHLAYEV, M.D., prof., zasluzhennyy deyatel' nauki AzSSR; SHUBENKO-
GABUZOVA, I.N., kand.med.nauk

Rare case of leiomyoma of the nasal cavity. Zhur.ush., nos. i
gorl. bol. 20 no.4:58-59 Jl-Ag '60.   (MIRA 14:6)

1. Iz otorinolaringologicheskoy kliniki Azerbaydzhanskogo instituta
usovershenstvovaniya vrachey i patologoanatomicheskogo otdeleniya
3-y klinicheskoy bol'nitsy Baku.
                         (NASOPHARYNX—TUMORS)

KAZHLAYEV, M. D., prof.; SHUBENKO-GABUZOVA, I. N., kand. med. nauk

Rare observation of reticulosarcomatosis with primary manifestations
in the trachea. Vest. otorin. no.3:82-84 '61.   (MIRA 14:12)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. - prof. M. D. Kazhlayev)
Azerbaydzhanskogo instituta usovershenstvovaniya vrachey i patolo-
goanatomicheskogo otdeleniya 3-y klinicheskoy bol'nitsy Baku.

(TRACHEA—CANCER)

KAZHLAYEV, M.D., prof.; SHUBENKO-GABUZOVA, kand.med.nauk

Fibroma of the palatine tonsil. Vest.otorin. 23 no.1:89-91
Ja-F '61.   (MIRA 14:2)

1. Iz Moskovskoy nauchnoy otorinolaringologicheskoy kliniki
Azerbaydzhanskogo instituta usovershenstvovaniya vrachey i
patologo-anatomicheskogo otdeleniya 3-y gorodskoy bol'nitsy,
Baku.
                    (TONSILS—TUMORS)

KASHLAYEV, M.D., prof.; zasluzhennyy deyatel' nauki Azerbaydzhanskoy SSR;
SHUBENKO-GABUZOVA, I.N., kand.med.nauk.
Black "hairy tongue." Zhur.ush.,nos.i gorl.bol. 22 no.4:77-78
Jl-Ag '62.   (MIRA 16:2)

1. Iz kliniki bolezney ukha, gorla i nosa Azerbaydzhanskogo insti-
tuta usovershenstvovaniya vrachey i patologoanatomicheskogo otde-
leniya 3-y klinicheskoy bol'nitsy g. Baku.
                        (TONGUE—DISEASES)

SHUBENKO- GABUZOVA, I.N., kand. med. nauk

Meconial peritonitis in congenital cystic fibrosis of the
pancreas. Pediatriia 42 no.8:92-93 Ag'63   (MIRA 17:4)

1. Iz patologoanatomicheskogo otdeleniya 3-y Bakinskoy kli-
nicheskoy bol'nitsy imeni Dzhaparidze (glavnyy vrach I.G.
Kadymov).

SHUBENKO-GABUZOVA, I.N. (Baku)

Primary actinomycosis of the stomach. Arkh. pat. 27 no.3:83-85 '65.
(MIRA 18:5)

1. Patologoanatomicheskoye otdeleniye klinicheskoy bol'nitsy No.3
imeni Dzhaparidze (glavnyy vrach I.G. Kadymov).

SHUBENKO-GABUZOVA, I.N.

Appendicitis and enterobiasis. Med. paraz. i paraz. bol. 34
no. 5:563-566 S-O '65   (MIRA 19:1)

1. Patologoanatomicheskoye otdeleniye Klinicheskoy bol'nitsy
No. 3 imeni Dzhaparidze, Baku. Submitted May 15, 1964.

Shubenko, L. A.

AID P - 2029

Subject   : USSR/Electricity

Card 1/1   Pub. 110-a - 2/14   Ukr

Author   : Shubenko, L. A., Academy of Sciences, USSR - Khar'kov

Title   : Some problems in the development of steam-turbine design

Periodical : Teploenergetika, 4, 6-12, Ap 1955

Abstract   : The author is concerned with the developments in the
               field of high-pressure (above 130 atm) and high-tempera-
               ture (above 535°C) steam-turbine production in units of
               100-, 150-200, and even 250- thousand kw.   Four
               diagrams.

Institution: Khar'kov Turbine Plant im. Kirov

Submitted : No date

AUTHOR: Shubenko, L. A.

TITLE: New Turbines Being Built at the Kharkov Turbine Plant as Part of the Sixth 5-Year Plan (O novykh turbinakh, vypuskayemykh Khar'kovskim turbinnym zavodom v shestoy pyatiletke)

ABSTRACT: In 1956, the Kharkov turbine plant is supposed to build a new type VKT-100, 100-Mw turbine having somewhat higher steam parameters than those of the older MK-30 turbines and the Leningrad metal plant turbine. It is stated that 71 subassemblies of the total number of 88 are identical in both MK-30 and VKT-100 turbines; in the remaining 17 subassemblies, 62% of parts are common. In 1956, Kharkov turbine plant is supposed to have released working blueprints of a new PVK-150 turbine designed for steam at 180 atm and 565° C. This turbine proved to be 7 m shorter than the SVK-150 of the

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SOV/112-58-1-184

New Turbines Being Built at the Kharkov Turbine Plant as Part of the Sixth . . . . .

Leningrad metal plant. It is expected that its cost will be one-half that of the SVK-150 turbine and that it will be as economic to run. In 1957, Kharkov turbine plant expects to finalize the blueprints of the SVK-200 turbine. In addition, the same plant is assigned to build a SVR-100 steam turbine for superhigh-steam parameters at 300 atm, 650° C. Solutions of construction problems involved in the above turbine and in the SVK-300 300-Mw turbine are indicated.

B. Ya. Z.

AVAILABLE: Library of Congress

1. Steam turbines--Production

Card 2/2

SHUBENKO-SHUBIN, L.A.

Construction of steam turbines in Switzerland.   Energomashinostroenie
no.8:27-31 Ag '56.   (MLRA 9:10)

1. Chlen-korrespondent AN USSR.
    (Switzerland--Steam turbines)

SHUBENKO-SHUBIN, L.A.

Laboratories of Swiss turbine manufacturing firms. Energomashinostroe-
nie no.10:29-32 O '56.   (MIRA 10:1)

1. Chlen-korrespondent Akademii nauk SSSR.
                (Switzerland--Turbines)

SHUBENKO-SHUBIN, L.A.

Gas turbine manufacturing in Switzerland; personal impressions.
Energomashinostroenie no.11:25-29 N '56.   (MLRA 9:12)

1. Chlen-korrespondent Akademii nauk USSR.
    (Switzerland--Gas turbines)

SHUBENKO-SHUBIN, L.A.

Closed-cycle marine gas trubine installations; from impressions
of a trip to Switzerland. Sudostroenie 22 no.9:37-39S '56. (MIRA 10:1)
(Switzerland--Marine gas turbines)

339

AUTHOR: Shubenko-Shubin, L.A., Corresponding Member Academy of Sciences, Ukraine.

TITLE: On recent achievements of some British firms building turbine equipment. (O noslednikh dostizheniyakh nekctorykh angliyskikh turbostroitelnykh firm.)

PERIODICAL: "Energomashinostroenie", (Power Machinery Construction), 1957, No. 4, pp. 28 - 29, (U.S.S.R.)

ABSTRACT: In this paper, the impressions are described which were gained by the author during a visit, in 1956, to two British firms, C.A. Parsons and Co.Ltd. and British Thomson-Houston, building turbine equipment. Another author, I.V. Ilyukhin, described his impressions gained at Metropolitan-Vickers and English Electric in a paper published in December, 1956.

SHUBENKO, L.A.

Notes on British gas-turbine construction. Teploenergetika 4 no.3:57-
60 Mr '57.
(MIRA 10:3)

1. Chlen-korrespondent AN USSR.
(Great Britain--Gas turbines)

SHUBENKO-SHUBIN, L.A.

Milestones in the development of Soviet steam-turbine engineering
and its prospects. Teploenergetika 4 no.11:25-35 N '57.
                                                    (MIRA 10:10)

1.Chlen-korrespondent AN USSR. 2.Khar'kovskiy turbinnyy zavod.
                (Steam turbines)

SHUBENKC, L. H.

25-8-2/42

AUTHOR: Shubenko, L. A., Member-Correspondent of the Ukrainian SSR
               Academy of Sciences, Chief Designer at the Khar'kov Turbine
               Plant imeni M. Kirov.

TITLE: Giant Turbines (Turbiny-Giganty)

PERIODICAL: Nauka i Zhizn', No. 8, pp. 5-9 (USSR) -1957

ABSTRACT: At the present time thermal power plants in the USSR
               generate about 85% of the total power, while hydroelectric
               power plants produce only 15%. The importance of the latter,
               however, will increase with the construction of new installa-
               tions, such as the Kuybyshev, Stalingrad, Irkutsk and Bratsk
               hydroelectric power plants. The author deals with the con-
               struction of giant turbines to be installed in contemporary
               thermal and hydroelectric power plants. During the 6th Five-
               Year Plan, the construction of new hydropower plants will help
               to increase the capacity 2.7 times. This will be only 18.4%
               of the total output leaving the thermal stations with an out-
               put of 75% to 80%. Fuel resources have increased tremendously
               since the discovery of atomic energy. Soviet Russia was the first
               country in the world to put an atomic power plant into operation
Card 1/4   with a capacity of 5,000 kw.

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Giant Turbines

Stations with still higher capabilities will play a decisive part in the development of Soviet power engineering. After World War II, scientists succeeded in designing turbines which could operate under a pressure of 90 atm and at a temperature of 500°C. High-pressure steam turbines with capacities of 25,000, 50,000 and 100,000 kw, needing 12-15% less fuel than turbines of medium pressure, were also built in the Soviet Union. More powerful turbines improve the compactness of the power stations, increase their capacity to more than 600,000 - 900,000 kw, reduce the time required for construction, as well as the construction costs. Attempts are being made at the Khar'kov Turbine Plant (Khar'kovskiy turbinnyy zavod) to double its planned capacity by manufacturing turbines of 100,000 to 300,000 kw by the end of the 6th Five-Year Plan, and in general to increase the production of steam turbines 6 times, compared to the 1955 level. The designers of the Khar'kov Turbine Plant have designed a new, more economical 100,000 kw turbine. The first models are just being completed. They have developed designs for the construction of turbines with capacities of 150,000 and 200,000 kw. A project for a giant 300,000 kw turbine is

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