DODU, A., ing.

Causes of decreased breaking strength of yarns during the knitting of fine stockings on automatic circular machines. Ind text Rum 15 no.7:346-349 Jl '64

1. Textile Research Institute, Bucharest.

DODU, A., ing.

Some aspects of the knitting industry in Hungary. Ind text Rum 16 no.1:42-44 Ja '65.

1. Textile Research Institute.

DODU, Aristide, okleveles mernok

Testing yarn defects on fine stocking circular knitters.
Magy textil 17 no.3:129-130 Mr '65.

1. Bucharest Textile Research Institute, Bucharest, Rumania.

IAROVICI, M., candidat in stiinte economice; COSMA, M., ing.; DODU, A., ing.; MACOVEI, M., ing.; GIURCA, Virginia; HARDT, Hedi, ing.

Aspects of the comparative economic efficiency of the main textile technologies. Ind text Rum 15 no.11:573-580 N '64.

1. Institute for Textile Research, Bucharest.

DoDU, I.

COUNTRY : Rumania
CATEGORY : Cultivated Plants. Fruits. Berries. Nut. Tea.

ABS. JOUR. : RZhBiol., No. 4, 1959, No. 15812

AUTHOR : [illegible], Ioan
INST. : —
TITLE : Behaviour of Black Walnut (Juglans nigra L.) in the Suchavskaya Oblast (Rumania)

ORIG. PUB. : Rev. pădurilor, 1958, 73, No.4, 297

ABSTRACT : No abstract

1/1

DODU, Sterian, conf. ing., candidat in stiinte tehnice

Metal bridges and other metal constructions with artificial initial efforts. Rev transport 11 no.7:301-305 Jl '64.

DODUSENKO, A.

Along the untrodden path. Sov. profsoiuzy 18 no.19:7-10 O '62.
(MIRA 15:9)

1. Profsoyuznyy organizator Karlovskogo kolkhozno-sovkhoznogo territorial'nogo upravleniya, Poltavskaya obl.
(Poltava Province—Trade unions—Officers)
(Poltava Province—Agricultural administration)

DODZIN, L. I.

PHASE I BOOK EXPLOITATION 535

Dodzin, L. I., Engineer

Pnevmaticheskoye prisposobleniye dlya frezerovaniya gnezda pod plastinku i zadnikh graney derzhavok reztsov (Pneumatic Attachment for Milling Tool-tip Slots and Back Faces of Tool Holders) Leningrad, 1955. 10 p. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy. Informatsionno-tekhnicheskiy listok, 69/757/) 7,000 copies printed.

Sponsoring Agencies: Leningradskiy dom nauchno-tekhnicheskoy propagandy, and Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy.

Ed.: Semenenko, P. A.; Tech. Ed.: Gvirts, V. L.

PURPOSE: This pamphlet is intended for engineering personnel and machine tool operators.

Card 1/2

COVERAGE: The pamphlet describes the design and construction of a pneumatic clamping attachment employed in milling tool-tip recesses and back faces of tool holders. The attachment, built at the Leningrad Metal Plant imeni Stalin, consists of a pneumatic clamping fixture and a universal swing table. There are no references. No personalities are mentioned.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 2/2

VK/jmr
8-20-58

DODZIN, L.I., inzhener.

Polishing intricate master forms. Energomashinostroenie no.5:25-26 My '56. (Grinding and polishing) (MLRA 9:9)

DODZIN, L. I.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mornik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

Card ~~1/12~~

57

Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

Card ~~2/12~~

DODZIN, Ya.I., redaktor; VELIZHEVA, A.B., redaktor; SOLOV'YEV, S.N., tekhnicheskiy redaktor

[The periodical press of the U.S.S.R., 1917-1949; a bibliography. Journals, transactions and bulletins on public health, medicine, physical culture and sports] Periodicheskaia pechat' SSSR, 1917-1949; bibliograficheskii ukazatel'. Zhurnaly, trudy i biulleteni po zdravookhraneniiu, meditsine, fizicheskoi kul'ture i sportu. Moskva, 1956. 170 p. (MLRA 10:3)

1. Vsesoyuznaia knizhnaya palata.
(Bibliography--Public health) (Bibliography--Medicine)
(Bibliography--Physical education and training)

Dodzina F.I.

IVANOV, M.F.; DODZINA, F.I.

Histological analysis of sexual glands of the migratory Volga herring during the periods of migration and spawning. Uch. zap. LGU no.228: 155-180 '57. (MIRA 10:11)
(Volga River--Herring) (Generative organs)

DOFEK, B.; VRBA, C.

Studies of local anesthetics. XXIII. Basic acetyl mesidine. Coll Cz Chem 25 no.6:1596-1601 Je '60. (EEAI 10:9)

1. Institut fur pharmazeutische Chemie, Masaryk-Universitat, und Institut fur Pharmakologie, tierarztliche Fakultat, Landwirtscheftliche Hochschule, Brno.

(Local anesthesia) (Trimethylaniline) (Acetyl group)

HUNGARY/Virology - Human and Animal Viruses. E-3

Abs Jour : Ref Zhur - Biol., No 11, 1958, 47799

Author : Doenoak, I.
Inst : -
Title : Investigation of Interactions Between Coxsackie and Poliomyelitis Viruses. I. Simultaneous Infection with Bl Coxsackie and Lansing Poliomyelitie Viruses in Mice of Different Ages.

Orig Pub : Acta Microbiol Akac Sci Hung, 4, No 2, 183-195 (1957) (in English)

Abstract : Bl Coxsackie virus (groups B type 1) was used in the form of suspensions of tissues from newborn infected mice; the Lansing poliomyelitis virus was used in the form of brain tissue emulsions from infected adult mice. The experiments were carried out on nine-day-old mice, relatively susceptible to the Bl Coxsackie virus, and on twenty-one-day-old mice giving no neutological symptoms following injections with taht virus. Poliomyelitis virus in

Card 1/3

Abs Jour : Ref Zhur - Biol., No 11, 1958, 47799

dilutions of 10^{-2}-10^{-4} (titration on adult mice) and 10^3 or 10^5 LD_{50} of Coxsackie virus (titration on newborn born) were injected simultaneously intracranially into nine-day-old mice. The test animals were kept under observation for 30-35 days. The two diseases were easily differentiated by the symptoms characteristic of each. The mortality rate of the mice from the Coxsackie virus was small; the the mortality rate from the poliomyelitis virus was found to be dependent on the dose administered. The animals infected with both viruses were observed to have a lower mortality rate and a longer incubation period than those infected with poliomyelitis virus alone. The Coxsackie virus was found to interfere with the poliomyelitis virus both in cases of intracranial injection and in cases of subcutaneous injection. In the experiments with twenty-one-day-old mice the results obtained were negative. Young mice surviving after intracranial injection of

Abs Jour : Ref Zhur - Biol., No 11, 1958, 47799

either both viruses of the Coxsackie virus alone exhibited increased resistance to subsequent infection with poliomyelitis virus; at the same time it was found that the introduction of the poliomyelitis virus alone does not produce such an increase in resistance. In view of the fact that the above two viruses are not antigenically related, the author expresses the opinion that the Coxsackie virus increases the immunity of the test subjects to the poliomyelitis virus. In twenty-one-day-old mice a limited immunity to subsequent infection with poliomyelitis virus was observed only in the case of simultaneous injection of both viruses.

DOERFFER, Jerzy, doc., dr., inz.

The interdependence of shipbuilding and equipment in the block method. Bud okretowe Warszawa 6 no.9:278-280 '61.

1. Politechnika Gdanska.

(Poland--Shipbuilding)

DOERFFER, Jerzy, prof. dr inz.

Development of shipyeards and the merchant fleet during the past 20 years of the Polish People's Republic. Przegl techn 85 no. 25:7,8 21 Je '64.

DOERFFER, Jerzy, prof. dr inz.; BURAU, Herman, mgr; ZABIELLO, Erazm, mgr inz.; STOLAREK, Piotr; MURZYNSKI, Konrad, mgr inz.; MADEJ, Jan

Twenty years at the seaside and on the sea. Przegl techn 85 no.26:6,7 28 Je'64.

1. Chairman of the Voivodeship Contacts Committee, Central Technical Organization, Gdansk (for Doerffer). 2. Chief Executive, Polish Ocean Lines, Gdynia (for Burau). 3. Chief Executive, Komuna Paryska Shipyards, Gdynia (for Zabiello). 4. Chairman, Gdansk Voivodeship People's Council (Stolarek). 5. Director, Gdansk Association of the Building Industry (for Murzynski). 6. Secretary of the Gdansk Voivodeship Committee of the Trade-Unions. (for Madej).

DOERFFER, Jerzy, prof. dr inz.

The Shipyard Worker's Day and the 20th anniversary of the Polish People's Republic. Bud okretowe Warszawa 9 no.6: 187-188 Je '64.

1. Dean of the Division of Shipbuilding, Technical University, Gdansk.

DOERFFER, Jerzy, prof. dr

Letter to the editor. Bud okretowy Warszawa 9 no.7:3 of cover Jl '64.

1. Dean, Division of Shipbuilding, Technical University, Gdansk.

COUNTRY : Poland E-1
CATEGORY : Analytical Chemistry - General

ABS. JOUR. : RZKhim., No. 24 1959, No. 85955

AUTHOR : Doerffel, K.
INST. :
TITLE : Error Control in Series Analyses

ORIG. PUB. : Chem. analit., 1958, 3, No 3-4, 403-406

ABSTRACT : In the book of Youden (Youden W.J., Statistical Methods of Chemists, New York, 1951), in studying the analytical methods it is proposed to determine 2 quantities one of which causes the occurence of a constant error which does not depend on the concentration being determined, the other -- causes the occurence of variable errors, the magnitude of which varies in proportion to the concentration being determined. The author introduces a further refinement and subdivides the variable errors in 2 groups: errors of 1st kind, which do not depend upon extraneous elements, and errors of 2nd kind, caused by influence of extraneous elements. The constant error ε is determined from

CARD: 1/3

COUNTRY : Poland
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 85955

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : equation: $(v_1-\varepsilon)/e_1 = (v_2'-\varepsilon)/e_2$, where v_1' and v_2' -- results of analysis vitiated by errors; e_1 and e_2 -- the weighed samples ($e_1 \simeq 2e_2$). Factor α causing the occurence of variable errors of 1st kind is determined from equations: $v_1' = \alpha v$, $v_2' = \alpha(v+z)$, where z -- amount of the substance being determined, that has been added to sample containing an amount v of the substance. The factor β which causes the occurence of variable errors of 2nd kind, is determined from the same equations, but in this case there is added not the element that is being determined, but the interfering element. In the absence of errors $\bar{\varepsilon} = 0$, $\bar{\alpha} = 1.000$, $\bar{\beta} = 0$. Statistical evaluation is

CARD: 2/3

63

COUNTRY : Poland E-1
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 85955

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : effected by means of t-criterion:

$t_\varepsilon = (\bar{\varepsilon}/s_\varepsilon)\sqrt{n}$, $t_\alpha = (|1 - \bar{\alpha}|/s_\alpha)\sqrt{n}$, and

$t_\beta = (\bar{\beta}/s_\beta)\sqrt{n}$.

The question concerning determination of $\bar{\varepsilon}$, $\bar{\alpha}$, and $\bar{\beta}$, from current analyses is discussed.

V. Nalimov.

CARD: 3/3

DOETSCH, K.
DOETSCH, K

Boiler apparatuses for central heating.

p. 90 (EPULETGEPEZET) Budapest, Hungary Vol 6, no 2/3 1957

SO: Monthly Index of East European Acessions (AEEI) Vol. 6 No. 11 November 1957

2593. A NEW SERIES OF ACETOMESIDIDE DERIVATIVES WITH LOCAL ANAESTHETIC ACTIVITY - Eine neue Reihe lokalanästhetisch wirksamer basischer Acetylmesidine - Dofek R. and Vrba Č. Inst. für Pharmazeut. Chem., Masaryk-Univ. und Pharmakol. Inst., Fak. für Veter. Med., Brno - EXPERIENTIA (Basel) 1959, 15/3 (120-121) Tables 1

A series of basic derivatives of acetomesidide (acetylmesidine) have been synthesized. Several compounds showed high local anaesthetic activity and a therapeutic index comparing very favourably with those of procaine and cocaine.

Kreppel - Bonn

KLIMES, B., doc. MVDr.; VRBA, Cenek, MVDr.; DOFEK, Rudolf, PhMr. CSc.; SLOVACEK, Stanislav, promovany veterinarni lekar

Biologic efficiency of nitrofurazone in relation to the stability of its aqueous solution. Veter medicina 9 no.1:39-42 Ja '64.

1. Chair of Poultry Diseases, Faculty of Veterinary Medicine, Brno and State Veterinary Institute, Department of Drug Control.

GEORGHITA, I. ; DOFESCU, M.

Geologic research in the Firiza-Izvoare-Cracesti region.
Dari seama sed 46:337-354 '58/59 [publ. '62].

KERESZTES, Istvan; DOFFEK, Janos

Joint enterprises. Mezogazd techn 3 no.3:26-27 '63.

CZECHOSLOVAKIA

SOLICH, J; DOFKOVA, L; DUSKOVA, M; RUML, M; VONASKOVA, E.

1. Chair of Pharmaceutical Work of the Pharmaceutical Faculty of UK (Katedra farmaceutickeho provozu Farmaceuticke fakulty UK), Bratislava; 2. Faculty Apothecary (Fakultni lekarna), Brno

Bratislava, Farmaceuticky obzor, No 5, 1963, pp 218-226

"Thematics of Sanitation-Explanatory Work of the Druggist II. Problematic of the Misuse of Drugs."

DOFKOVA, L., prom.farm., doc. PhMr.; SOLICH, J., CSc.

On the problem of drug addiction. Cesk.zdrav. 11 no.11:494-503 N '63.

1. Farmaceuticka fakulta UK Bratislava; katedra farmaceutickeho provozu; fakultni lekarna v Brne.

CZECHOSLOVAKIA

DOFKOVA, L.

No affiliation given

Bratislava, Farmaceuticky obzor, No 11 [November] 1966, p 525

"Misuse of barbiturates and sedatives."

CZECHOSLOVAKIA

DOFKOVA, L.

Dept. of Pharmaceutic Supply, Faculty of Pharmacy, Comenius?Univ. (Katedra farmaceutickeho provozu FaFUK), Faculty Pharmacy (Fakultni lekarna), Brno

Bratislava, Farmaceuticky obzor, No 2 [Feb] 67, pp 61-64

"Information and documentation activities of the pharmacist in hospital pharmacy."

L 51023-65 EWP(e)/EWT(m)/EWP(t)/EWP(b)/EWP(i) IJP(c) JD

ACCESSION NR: AP5017825

AUTH: [illegible]

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 5, 1965, 1248-1251

TOPIC TAGS: [illegible] antimony, epitaxial growth, [illegible]

ABSTRACT: [illegible] used antimony as the [illegible]

[illegible]

$^1/_2Me + {}^1/_2MeJ_3 \rightleftharpoons MeJ$

$^1/_2Me + {}^1/_2MeJ_3 \rightleftharpoons MeJ_3$

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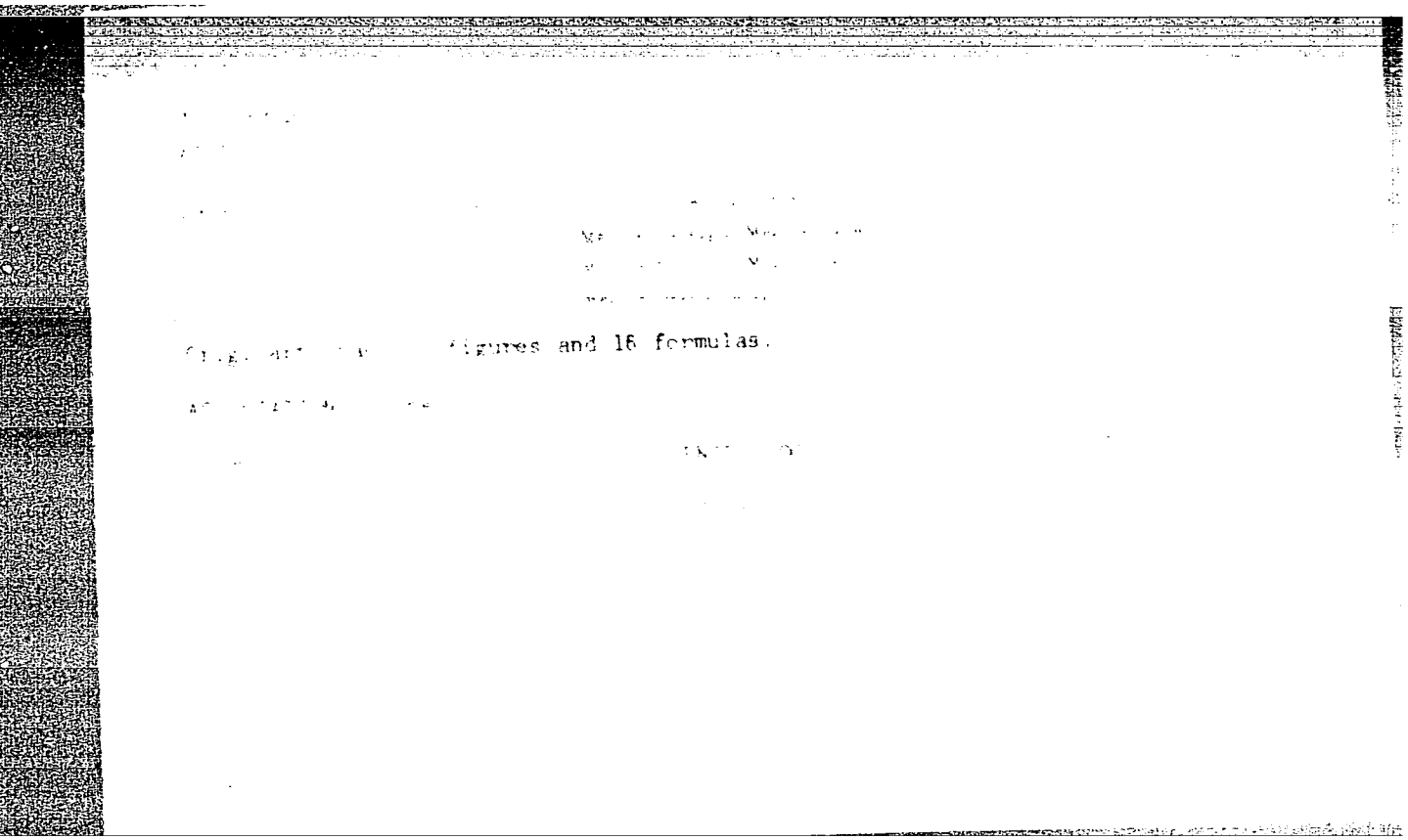

figures and 16 formulas.

3(7) SOV/50-59-2-10/25

AUTHOR: Dogadayeva, L. P.

TITLE: Forecast of the Volume of the Water Supply and the Highest Levels in the Spring Flood Several Months in Advance (Prognoz ob"yema stoka i naivysshikh urovney vesennego polovod'ya s bol'shoy zablagovremennost'yu)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 2, pp 42 - 43 (USSR)

ABSTRACT: In order to solve the problem posed, it was tried to establish an early forecast (5-6 months in advance) for the volume of water supply and the highest levels of the spring floods of the Don and its tributaries Sosna, Voronezh, Bityug, Sev.Donets, Oskol and Kalitva, taking into account all factors preceding the flood. The monthly precipitation and the average monthly air temperature were considered for an estimate of the wetting degree of the bottom of the basin. Based on these values the empiric coefficient of wetting (c) in autumn was determined. c is regarded as an average value for a period of 3-4 months. The fluctuations in the snow accumulation are neglected and the dependence of the highest level and the volume of the water supply on c

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Forecast of the Volume of the Water Supply and the Highest Levels in the Spring Flood Several Months in Advance

SOV/50-59-2-10/25

are calculated from $H_{max} = f(c)$ and $y = f(c)$. According to these formulas forecasts can be established about 5-6 months in advance. The diagrams which have been plotted on the basis of observations made in the course of 19 to 27 years are given. This method was applied in 1957 and 97% of the results yielded by it were satisfactory. There are 2 figures.

Card 2/2

L 47449-66 EWT(m)/EWP(w)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6014606 (N) SOURCE CODE: UR/0133/66/000/005/0461/0464

AUTHORS: Gulyayev, A. P.; Anuchkin, M. P.; Georgiyev, M. N.; Dogadayeva, V. A.

ORG: All-Union Scientific Research Institute for the Production of Pipe Mains (Vsesoyuznyy n.-i. institut po stroitel'stvu magistral'nykh truboprovodov); TsNIIChM

TITLE: A study of the cold shortness of heat-treated steels for pipe manufacture

SOURCE: Stal', no. 5, 1966, 461-464

TOPIC TAGS: steel pipe, steel property, steel tempering, steel testing / 17GS steel, 14GN steel

ABSTRACT: The effectiveness of heat treating steels 17GS and 14GN to increase their resistance to cold shortness was tested. Steel 17GS was produced in the Cherepovets Metallurgical Plant (Cherepovetskiy metallurgicheskiy zavod); steel 14GN was produced in the Orsk-Khalilovskiy Metallurgical Combine (Orsko-Khalilovskiy metallurgicheskiy kombinat). Their respective elemental compositions are:

	C	Si	Mn	Ni	Cr
17GS	0,19	0,43	1,35	0,36	—
14GN	0,16	0,34	1,00	0,50	0,16

	S	P	O_2	H_2	N_2
17GS	0,014	0,01	0,003	0,0004	0,003
14GN	0,027	0,02	0,023	0,0007	0,005

Card 1/2

L 47449-66

ACC NR: AP6014606

Fragments cut from the pipes were heat treated and machined into specimens for mechanical testing. The type of heat treatment is explained. Mechanical properties of the two materials were tested for their change in respect to the temperature of tempering, and the results of these tests are presented graphically. In the tension tests, the method of N. A. Kahn and E. A. Imbombo (The Welding Journal, 1950, v. 29, No. 2, p. 84S--96S) was applied. A study of impact strength revealed an almost straight-line relation between this property and the cross section width. The type of failure and the crack formation were investigated and are shown for various temperatures and areas, while the microstructure of the two steels at various types of tempering is presented photographically. The materials were further tested for their embrittlement at various heat treatments, with the results of the embrittlement experiments shown in a table. It is noted that steel 17GS is most resistant to embrittlement after being hardened and tempered at 600C, and steel 14GN at 500C. Temperatures of -60 and -40C are, respectively, the lowest to which the two investigated steels may be subjected. Orig. art. has: 9 figures, 1 microphotograph, and 1 table.

SUB CODE: 13,11/SUBM DATE: none/ ORIG REF: 001/ OTH REF: 004

UR 0915-66 EWT(d)/EWT(m)/EWP(f)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l)
ACC NR: AP6020739 IJP(c) JD/HW/JH SOURCE CODE: UR/0136/66/000/006/0072/0076

AUTHOR: Mochalov, P. P.; Dogadin, B. V.; Partin, I. A.

ORG: none

TITLE: Adaptation of plant equipment for single sheet annealing of aluminum alloys

SOURCE: Tsvetnyye metally, no. 6, 1966, 72-76

TOPIC TAGS: aluminum alloy, annealing, metallurgic furnace

ABSTRACT: The authors describe basic designs and subsequent in-plant modifications of KAPZ-5 and KAPZ-7 conveyor type annealing furnace systems, capable of annealing sheets 0.8 to 3.5 mm thick and with maximum dimensions of 2000x5000 and 2000x7000 mm respectively. Two chain conveyor systems, powered by a single P-91 32-kw d-c motor, transport each sheet separately through a rectangular vertical hot air furnace chamber. The sheet suspension system is treated in detail. The overall installation is easily incorporated into a factory flow line. Productivity is 1.5 to 3.5 t/hr, depending on the thickness of the 7000 mm sheet. The reject factor averaged 0.22%. Temperature gradients across the annealed sheet did not exceed 3 to 5C. Major components of the system are described and illustrated. Material specifications are given for parts subject to significant wear and temperature variations.

L 40915-66

ACC NR: AP6020739

14

S. A. Baum, M. K. Gur'yev, A. V. Kizilov, Ye. Ya. Osipov, A. P. Chernoskutov, A. A. Nadezhin, B. P. Skachek, N. V. Martynov, I. I. Ken, B. V. Kulygin, Ye. M. Ivanov, G. D. Dymov, M. I. Kudryavtsev, and A. I. Nabatchikov took part in the work. Orig. art. has: 4 figures.

SUB CODE: 13/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

PSURTSEV, N.; KUZ'MIN, V.; DOGADIN, V.; FORTUSHENKO, A., prof.; GUSEV, I.; BLOKHIN, A., kand. tekhn. nauk

Wealth of the millions. Radio no.8:4-6 Ag '64. (MIRA 17:11)

1. Ministr svyazi SSSR (for Psurtsev). 2. Nachal'nik Tekhnicheskogo upravleniya Ministerstva svyazi SSSR (for Kuz'min). 3. Zamestitel' nachal'nika Glavnogo upravleniya gorodskoy i sel'skoy telefonnoy svyazi i radiofikatsii (for Dogadin). 4. Glavnyy inzh. Glavnogo upravleniya gorodskoy i sel'skoy svyazi i radiofikatsii (for Gusev).

DOGADIN, V.

Fortieth anniversary of wire broadcasting. Radio no.4:12-13 Ap '65.
(MIRA 18:5)

1. Zamestitel' nachal'nika Glavnogo upravleniya gorodsko- i sel'skoy telefonnoy svyazi i radiofikatsii Ministerstva svjazi SSSR.

PSURTSEV, N.; KUZ'MIN, V.; DOGADIN, V.; FORUSHENKO, A., prof.; GUSEV, I.; BLOKHIN, A., kand. tekhn. nauk

It was accomplished by millions. Radio no.8:4-6 Ag '65.

(MIRA 18:7)

1. Ministr svyazi SSSR (for Psurtsev). 2. Nachal'nik Tekhnicheskogo upravleniya Ministerstva svyazi SSSR (for Kuz'min). 3. Zamestitel' nachal'nika Glavnogo upravleniya gorodskoy i sel'skoy telefonnoy svyazi i radiofikatsii (for Dogadin). 4. Glavnyy inzh. Glavnogo upravleniya gorodskoy i sel'skoy telefonnoy svyazi radiofikatsii (for Gusev).

L 15523-66 EWT(d)/FSS-2 JT
ACC NR: AP6008228

SOURCE CODE: UR/0107/65/000/004/0012/0013

AUTHOR: Dogadin, V. (Deputy chief)

ORG: Main Administration of Urban and Rural Telephone Communications and Establishment of Radio Facilities, Ministry of Communications, SSSR (Glavnoye upravleniye gorodskoy i sel'skoy telefonnoy svyazi i radiofikatsii Ministerstva svyazi SSSR)

TITLE: Wire broadcasting - 40 years

SOURCE: Radio, no. 4, 1965, 12-13

TOPIC TAGS: radio equipment, radio engineering, radio communication, radio broadcasting, electronic industry

ABSTRACT: The article reviews the past forty years of wire broadcasting in the Soviet Union, in terms of the volume of manufactured equipment and in terms of the ever growing network of installations. The advantages of this method of radio communication are pointed out, namely availability of service to any place at any time, reliability of service independently of the regular networks and any transmission difficulties, and last but not least the economy of power consumption followed by savings in equipment cost. Further mention is made about the trends and achievements in "radiofication" and "audiofication" of urban and rural areas all over the Soviet Union. The receiving

Card 1/2

L 15573-66

ACC NR: AP6008228

2

equipment manufactured at the "Riga" Works in the LatvSSR is described briefly. The activities of the State Committee on Radio Communications are discussed, its efforts and accomplishments are praised, certain deficiencies are pointed out and further goals are suggested. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09 / SUBM DATE: none

Card 2/2 MJS

DOGADIN, V. N.

Transliatsionnye seti veshchaniia. [Radio rebroadcasting system]. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio., 1942. 98 p. illus. DLC: TK6561.D6

Ustroistvo i obsluzhivanie radiotransliatsionnykh setei. [Installation and maintenance of the radio rebroadcasting system]. Odobreno v kachestve uchebnika dlia remeslennykh uchilishch sviazi. Moskva, Trudrezerizdat,1948 . 205 p. illus. DLC: TK6550.D57

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference department, Washington, 1951, Unclassified.

DOGADIN, V. N. PA 19T80

USSR/Radio, Wired Jul 1946
Cables, Underground

"Underground Radio Rebroadcasting Lines," M. S. Orlov, Candidate of Tech Sci, V. N. Dogadin, 2 pp

"Vestnik Svyazi - Elektro Svyaz'" No 7 (76)

Discusses the advantage of a system of underground wires coated with vinyl chloride over strung wire lines, with respect to subscriber or feeder lines. This underground system was worked out by A. Severoy at the Central Scientific Investigation Institute for Communications. Diagrams show the method of leading these wires into the individual houses.

19T80

DOGADIN, V.

PA-2T27

Apr 1947

USSR/Radio Communications Rebroadcasting Stations

"Exploitaion of Local Rebroadcasting Centers," S Lordkipanidze and V Dogadin, 4pp

"Vestnik Syyazi" Vol 7, No 85

Line distribution and station equipment, illustrated with schematic diagrams.

DOGADIN, V. N.

The organization and maintenance of radio relay systems. Moskva, Trudrezervizdat, 1948. 205 p. (49-25002)

TK6550.D57

DOGADIN, V.N.; BERG, A.I., obshchiy redaktor massovoy radio biblioteki.

[New technology in installing radio facilities for rural communities] Novaia tekhnika radiofikatsii sela. Moskva, Gos. energ. izd-vo, 1952. 63 p. (MLRA 6:5)
(Radio)

DOGADIN, V.

What the radio amateur-designer should work on in order to develop diffusion exchanges for collective farms. Radio no.9:8-9 S '53. (MLRA 6:8)
(Radio--Apparatus and supplies)

REPIN, A.S.; DOGADIN, V.N., redaktor; VEYNTRAUB, A.B., tekhnicheskiy redaktor

[Organization and operation of radio communication and boradcasting enterprises] Organizatsiia i ekspluatatsiia predpriiatii radio-sviazi i radioveshchaniia. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1953. 147 p. [Microfilm] (MLRA 10:3)
(Radio industry)

DOGADIN, Vianor Nikolayevich; GOROKHOVSKIY, A.V., redaktor; VEYNTRAUB, A.B., tekhnicheskiy redaktor.

[Wire broadcasting systems] Radiotransliatsionnye seti. Izd. 2-e, per. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1954. 271 p. [Microfilm]
(Radio) (MLRA 8:1)

DOGADIN, V. N.

"Radio Relay Nets," 2nd edition revised, SvyazIzdat, Moscow, 1954, 268 pp.

DOGADIN, Vladimir Nikolayevich; CHERNYAVSKAYA, Anastasiya Karpovna.

[Handbook for a collective farm radio technician] Posobie dlia kolkhoznogo radista. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio. 1954. 229 p.
(Radio--Receivers and reception) (MLRA 7:8)

DOGADIN, V.

USSR/ Electronics - Radiofication

Card 1/1 Pub. 89 - 12/30

Authors : Dogadin, V.

Title : Technical means for rural radiofication

Periodical : Radio 6, 18 - 20, Jun 1955

Abstract : The measures adopted by the Central Committee of the Communist party regarding radiofication of rural and agricultural regions of the USSR are discussed. The types of electric and electronic equipment recommended for the enlargement of already existing and for completely new radio stations serving rural regions, are listed. Drawings.

Institution : .....

Submitted : .....

SEVEROV, A.; DOGADIN, V.

Unremitting attention to radiofication. Radio no.12:20-21 D '55.
(Radio)
(MLRA 9:4)

DOGADIN, V.N., inzhener.

Pamphlets on the installation and use of underground cables with a nonmetallic sheath. Vest.sviazi 16 no.5:28-29 Je '56.(MLRA 9:8)
(Radio lines--Book reviews)

DOGADIN V. N.

POLDEYEV, Boris Georgiyevich; DOGADIN, V.N., otvetstvennyy red.; GALOYAN, M.A., red.; MAZEL', Ye.I., tekhn.red.

[SVR-ADU radio equipment] Apparatura SVR - ADU. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1957. 47 p. (MIRA 11:4) (Radio)

DOGADIN, V.N.

KLIMOV, V.P., inzh.; DOGADIN, V.N., inzh.

Competition of communication workers. Izobr. v SSSR 3 no.3:45-46 Mr '58. (MIRA 11:3)
(Telecommunication--Employees)

DOGADIN, V.N.

Let's provide the agriculture workers with radio and other means of communications. Vest.sviazi 20 no.2:23-24 F '60. (MIRA 13:5)

1. Zamestitel' nachal'nika UMTSR Ministerstva svyazi SSSR. (Telecommunication)

KANTOR, L.Ya.; GUMELYA, A.N.; ROZENBERG, Ya.G.; AFANAS'YEV, A.P.; SAMORUKOV, D.A.; GUSEV, S.S.; DOGADIN, V.N.; RAMENSKIY, B.N.; PIONTKOVSKIY, B.A.; SVERDLOVA, I.S., red.; KARABILOVA, S.F., tekhn. red.

[Electric communications and wire broadcasting] Elektricheskaia sviaz' i radiofikatsiia. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1961. 607 p. (MIRA 14:5)
(Telephone) (Wire broadcasting)

DOGADIN, V.N., red.

[Scientific session dedicated to "Radio Day"; annotations to the reports] Nauchnaia sessiia, posviashchennaia dniu radio; annotatsiia k dokladam. Moskva, 1962. 112 p.
(MIRA 18:8)

1. Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi.

KANTOR, L.Ya.; GUMELYA, A.N.; ROZENBERG, Ya.G.; AFANAS'YEV, A.P.; SAMORUKOV, D.A.; GUSEV, S.S.; DOGADIN, V.N.; RAMENSKIY, B.N.; KARASIK, N.S.; PIONTKOVSKIY, B.A.; Prinimal uchastiye MEDOVAR, A.I.; SVERDLOVA, I.S., red.; ULANOVSKAYA, N.M., red.; MARKOCH, K.G., tekhn. red.

[Electrical communications and wire broadcasting] Elektricheskaia sviaz' i radiofikatsiia. [By] L.IA.Kantor i dr. Izd.2., dop. i ispr. Moskva, Sviaz'izdat, 1963. 672 p. (MIRA 16:8)

(Wire broadcasting) (Telecommunication)

DOGADKIN, A. B., Cand Tech Sci -- (diss) "Method of research into non-uniformities in waveguides using millimicro radio impulses." Moscow, 1960. 13 pp; 1 page of diagrams; (Academy of Sciences USSR, Inst of Radio and Electrical Engineering); number of copies not given; price not given; (KL, 19-60, 133)

L 20022-65 EEC-4/EPF(k)-2/EWT(d) Pg-4/Pk-4/Pl-4/Po-4/Pe-4 ASD(a)-5/
ACCESSION NR AP4049730 S/0106/64/000

AUTHOR [illegible]

SOURCE [illegible]

TOPIC [illegible]

distinguishing features are: a few nanosecond pulses. [illegible]

Card 1/2

L 20022-65
ACCESSION NR: AP4049730

Supporting experiments with 11-m and 4.5-m circular waveguides [illegible]
8-nsec H[illegible] pulses are cited. Orig. art. has: 4 figures and [illegible] formulas.

ASSOCIATION: none

SUBMITTED: 24Jan64 [illegible]

SUB CODE: EC NO REF SOV: 00[illegible] OTHER: [illegible]

Card 2/2

L 9446-65 EWT(m)/EPA(s)-2 Pab RAEM(t)/RAEM(a) ESD(t)

ACCESSION NR: [illegible]

AUTHOR: [illegible] Bogatkin, A. B.; [illegible]

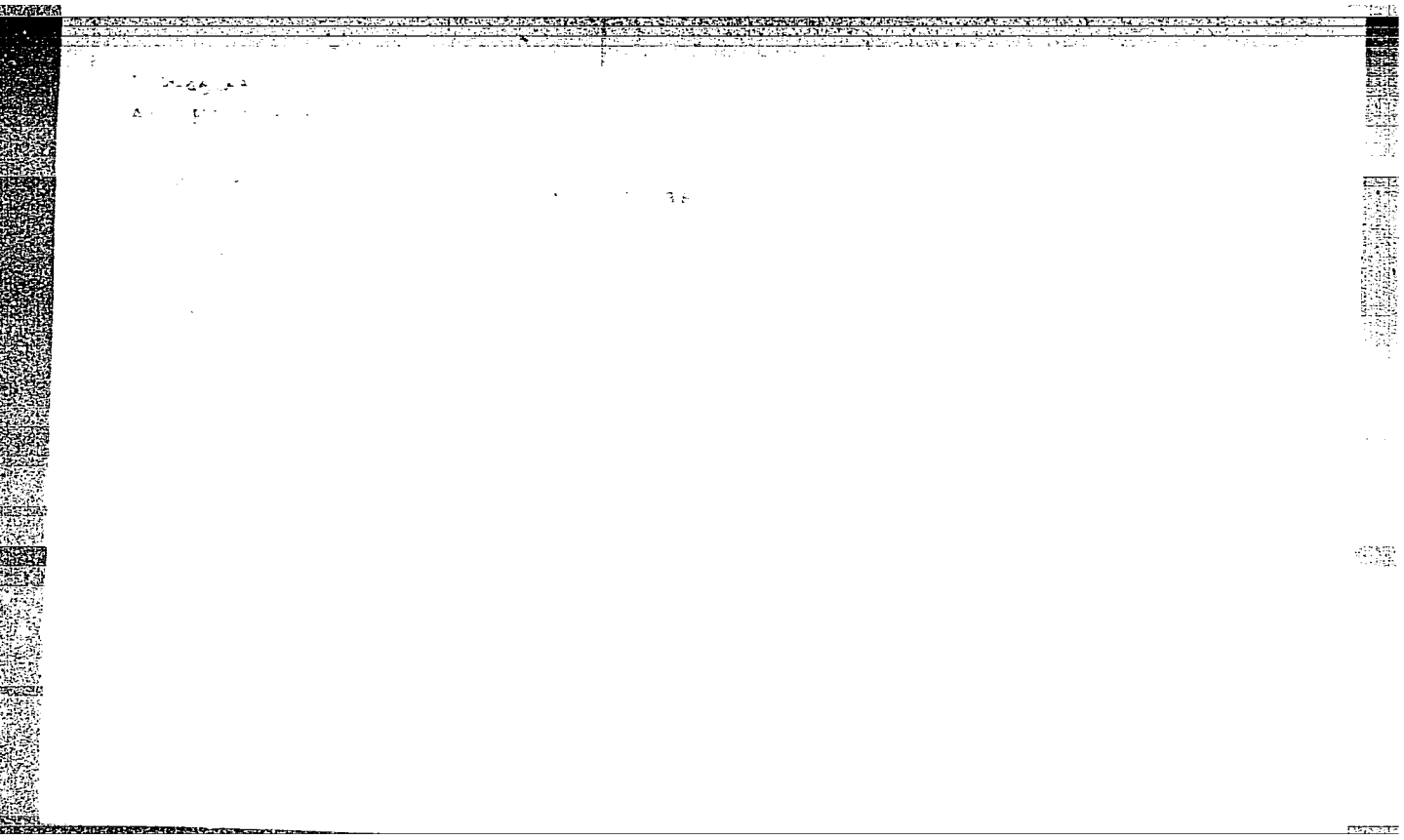
TITLE: [illegible]

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, 1707-1708

TOPIC TAGS: [illegible] transmission line, lens waveguide transmission system

ABSTRACT: Formulas are developed for the structure of [illegible] lens [illegible] power transmission [illegible] The system [illegible] sufficient for symmetrical [illegible] assumed [illegible] losses [illegible]

Card 1/2



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410720003-4"

L 8242-66

ACC NR: AP5022432 SOURCE CODE: UR/0109/65/010/009/1672/1675

AUTHOR: Vaganov, R. B.; Dogadkin, A. B.; Katsenelenbaum, B. Z. 29 23

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

TITLE: Periscopic mirror line

SOURCE: Radiotekhnika i elektronika, v. 10, no. 9, 1965, 1672-1675

TOPIC TAGS: beam waveguide, periscopic waveguide

ABSTRACT: It is proven that the use of spherical-surface mirrors, desirable for practical reasons in mirror beam waveguides, instead of the theoretically optimal ellipsoid-surface mirrors, does not seriously impair the waveguide parameters. Two mirrors with a spacing small in comparison with their focal lengths are regarded as a single phase corrector, and the radiation loss therein is evaluated after A. Fox and T. Li (IEEE, 1961, 51, 1, 80). Based on this evaluation and on

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UDC: 621.372.218:535.312

L 8242-66
ACC NR: AP5022432

the G. Boyd and J. Gordon loss/beam-cross-section curves (BSTJ, 1963, 40, 2, 489), a method for designing periscopic mirror lines is indicated. The radius of mirror curvature and the diffraction loss can be calculated from the formulas given. Orig. art. has: 1 figure and 11 formulas.

SUB CODE: 09 / SUBM DATE: 06Jun64 / ORIG REF: 004 / OTH REF: 003

Card 2/2

DOGADKIN, N. P.

Precast Concrete Construction

Work practice of a mixed team for stone setting and installation of prefabricated reinforced concrete construction. Sbor. mat. o nov. tekh. v stroi. 15, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

EARLIER PUBLICATIONS FOR THIS AUTHOR ARE AVAILABLE IN THE INACTIVE FILE -- WE WILL PULL THEM UPON REQUEST.

DOGADKIN, B. A., MLADENOV, I. and TUTORSKIY, I. A. (USSR)

O prevrashcheniyakh karboksilsoderzhashchikh butadienstirolnykh kautchukov i ikh smesei e epsilon-kaprolaktamom pod deistviem gamma-izlucheniya
Gamma-ray induced reactions of carboxylated butadiene-styrene rubgers and their mixtures with epsilon-caprolactam
IUPAC S III:293-301

report presented at the Intl. Symposium on Macromolecular Chemistry, Moscow, 14-18 June 60.

31979
S/081/61/000/023/056/061
B106/B101

15.9202
11.2211

AUTHORS: Tarasova, Z., Kaplunov, M., Vas'kovskaya, M., Dogadkin, B. A.

TITLE: Vulcanization structures and their effect on fatigue

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 560 - 561, abstract 23P351. (Sb. "Vulkanizatsiya rezin. izdeliy", Yaroslavl', 1960, 25 - 42)

TEXT: Vulcanizates of Hk(NK), butadiene styrene, and Na butadiene rubber with the accelerators Thiuram, diphenyl guanidine, captax, altax, and radiation vulcanizates of these rubbers have been examined to determine the type of cross linking. The latter was determined by isotopic exchange with sulfur, vulcanizing accelerators, vulcanizates containing radioactive sulfur, and by the method of determining the rate constant of relaxation of tension at constant deformation (Dogadkin, Tarasova, Kolloid. zhurnal, v. 15, no. 5, 1953, 347). The factors determining the exchangeability are the nature of the rubber and the composition of the vulcanizing group. The poorer the exchangeability, the higher the thermomechanical stability. The exchangeability of sulfur compounds decreases with increasing

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Vulcanization structures and their...

temperature and duration of vulcanization. The relative rate of exchange is higher at the beginning of vulcanization than later on. The number of exchangeable bonds passes through a maximum which corresponds to an optimum of vulcanization. The vulcanization temperature has different effects on the structure of the vulcanizate, which depend on the nature of rubber and the accelerators. Samples of СКС-30 (SKS-30), NK, and СКБ (SKB) rubber containing Thiuram, diphenyl guanidine, captax, and hexachlorane were subjected to fatigue tests by symmetrically alternating load. The fatigue resistance of vulcanizates rises with increasing energy of cross links. The variation in density of the vulcanization network of samples subjected to fatigue tests is determined by the nature of rubber and of the system of vulcanization, and depends on the direction of the regrouping processes of the radicals which are formed when the polymer chains and the bridge bonds break up. Fatigue at low temperatures (20 - 40°C) increases the exchangeability of vulcanizates, whereas it is reduced by fatigue at 100°C and higher temperatures. The fatigue resistance of rubber can be increased by adding acceptors for free radicals (disulfide p-tert-butyl phenol, hexachloroethane). [Abstracter's note: Complete translation.]

Card 2/2

28040
S/081/61/000/015/133/139
B102/B101

15.9130

AUTHORS: Fel'dshteyn, M., Orlovskiy, P., Dogadkin, B. A.,

TITLE: Effect of metal oxides as vulcanization activators

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1961, 602 - 603, abstract 15Л377 (Sb. "Vulkanizatsiya rezin. izdeliy". Yaroslavl', 1960, 139 - 155)

TEXT: The effect of ZnO, $Ca(OH)_2$, and MgO upon the vulcanization of various rubbers was investigated. In the case of coreless polymerized СКБ(SKB) ZnO decelerates the vulcanization. In butadiene-styrene rubbers, the activating effect of $Ca(OH)_2$ surpasses that of ZnO. Substitution of ZnO by MgO in tire mixtures increases the life of the tire tread. The activating action of metal oxides depends largely on the type of black. [Abstracter's note: Complete translation.]

Card 1/1

S/138/60/000/005/002/012
A051/A029

AUTHORS: Tutorskiy, I.A., Krokhina, L.S., Dogadkin, B.A.

TITLE: The Interaction Between Natural Rubber and Maleic Anhydride

PERIODICAL: Kauchuk i Rezina, 1960, No 5, pp. 3 - 6.

TEXT: The reaction mechanism between natural rubber and maleic anhydride during the rolling process was investigated. The experimental procedure is outlined and the concentration of the maleic anhydride, the distance between the rollers, the temperature of the rollers and that of the oxygen in the medium were studied as to their effect on the addition reaction of the maleic acid and the rubber, as well as the structuralizing process. The results of the experiment are discussed. Both the rate of the gel formation and its maximum amount increase with an increase in the maleic anhydride concentration when the natural rubber is masticated in open air (Fig. 1) The amount of the gel increases until the maleic anhydride is all spent (Fig. 2). It was shown that the addition reaction of the maleic anhydride, when the content of the latter is no more than 5% in the mixture, follows the first order reaction equation. It was also found that in the

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A051/A029

The Interaction Between Natural Rubber and Maleic Anhydride

rolling process of the natural rubber with maleic anhydride, the reactions of addition of the maleic anhydride to the rubber and the structuralizing process are parallel. In rolling with a clearance between the rollers, the structuralizing takes place with an inductive period, which decreases with an increase in the concentration of the maleic anhydride. The rate of the structuralizing during rolling in an argon atmosphere is considerably higher than in air. An increase in the temperature from 20 to 40°C when masticating the rubber in air causes destruction of the formed gel and has no practical effect on the quantity of the added maleic anhydride. There is a linear relationship between the quantity of added maleic anhydride and the amount of formed gel. There are 5 figures and 11 references: 1 Soviet, 4 English, 1 German and 5 French.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M.V. Lomonosov)

Card 2/2

FEL'DSHTEYN, M.S.; EYTINGON, I.I.; DOGADKIN, B.A.

Vulcanizing action of bis(oxydiethylene)thiuram) disulfide.
Vysokom.soed. 2 no.1:97-102 Ja '60. (MIRA 13:5)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Vulcanization) (Disulfide)

BRESLER, S.Ye.; DOGADKIN, B.A.; KAZBEKOV, E.N.; SAMINSKIY, Ye.M.; SHERSHNEV, V.A.

On the article by B.A.Dogadkin and V.A.Shershnev "The reaction of tetramethylthiuram disulfide with rubber and with compounds possessing a labile hydrogen atom." Vysokom.soed. 2 no.1:174 Ja '60. (MIRA 13:5)

(Rubber) (Vulcanization) (Thiuram disulfide) (Dogadkin, B.A.) (Shershnev, V.A.)

81608

S/190/60/002/02/07/011
B004/B061

15.9120

AUTHORS: Dogadkin, B. A., Fel'dshteyn, M. S., Belyayeva, E. N.

TITLE: The Action of Binary Systems of Vulcanization Accelerators. II. The Chemical Interaction of Accelerators and the Mechanism of the Activating Action of Binary Systems

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 2, pp. 247-258

TEXT: The authors previously (Ref. 1) examined the action of binary accelerator systems on the vulcanization of butadiene - styrene rubber mixtures. The action of such systems on the vulcanization of natural rubber is studied here. The following systems were used: di-2-benzothiazyldisulfide + diphenylguanidine; 2-mercaptobenzothiazole + diphenylguanidine; N-cyclohexyl-2-benzothiazole sulfenamide + diphenylguanidine; N,N'-diethyl-2-benzothiazole sulfenamide + tetramethylthiuram monosulfide. The action of these systems on the vulcanization, the kinetics of sulfur depositing (studied in collaboration with

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The Action of Binary Systems of Vulcanization Accelerators. II. The Chemical Interaction of Accelerators and the Mechanism of the Activating Action of Binary Systems

M. Krasukhina), the temperature dependence of the reactions, and the yield of 2-mercaptobenzothiazole are given in Figs. 1 - 13 and Tables 1 and 2. Fig. 14 shows microphotographs of the conversion of the sulfur which was separated by the reaction of di-2-benzothiazyldisulfide with hydrogen sulfide (taken by M. B. Rozova). The following conclusions are drawn from these data: The accelerator combinations examined can be divided, on the basis of their action during the main period of vulcanization, into a) systems with mutual activation of the accelerators; b) systems with activation of only one (the weaker) accelerator; and c) systems with additive action. The kinetics of the systems a) and b) are characterized by a delay in the initial stages of vulcanization compared with the kinetics of the separately applied components. 2-mercaptobenzothiazole is formed on the interaction of accelerators one of which contains benzothiazole groups, and the other is the hydrogen donor (e.g., di-2-benzothiazyldisulfide + diphenylguanidine). In rubber, this compound arises in all systems with mutual activation, when the

The Action of Binary Systems of Vulcanization Accelerators. II. The Chemical Interaction of Accelerators and the Mechanism of the Activating Action of Binary Systems

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rubber itself acts as a hydrogen donor. The connection between the yield of 2-mercaptobenzothiazole and the vulcanization activity of these systems was determined. A considerable increase in the yield of 2-mercaptobenzothiazole, caused by the formation of H_2S and its reaction with the disulfide, was observed in the presence of sulfur with systems of disulfides + sulfenamides, or disulfides + organic bases containing nitrogen. In systems where only one accelerator is activated, the yield of 2-mercaptobenzothiazole is much smaller than in systems with mutual activation. Based on these data, a scheme of the mutual activation of accelerators is drawn up, which assumes the formation of an intermediate complex in the initial stage, which decomposes into radicals initiating the polymerization and the reaction of the rubber with sulfur. The possibility on principle of the selection of binary and ternary accelerator systems which guarantee the performance of vulcanization at high temperatures without decreasing the strength of the vulcanizate, was established. There are 14 figures, 2 tables, and 8 references:

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The Action of Binary Systems of Vulcanization Accelerators. II. The Chemical Interaction of Accelerators and the Mechanism of the Activating Action of Binary Systems

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B004/B061

6 Soviet and 2 US.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

SUBMITTED: November 2, 1959

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S/138/60/000/012/007/009
A051/A027

AUTHORS: Fel'dshteyn, M.S., Orlovskiy, P.N., Dogadkin, B.A.

TITLE: The Action of Activators Depending on the Vulcanization Temperature

PERIODICAL: Kauchuk i rezina, 1960, No. 12, pp. 27-31

TEXT: The authors have investigated the action of activators of vulcanization (zinc oxide and calcium hydroxide) on the kinetics of the modulus change and tear resistance of mixtures from butadiene-styrene and natural rubbers depending on the vulcanization temperature. It was established that different metal oxides have a different effect on the nature of transverse bonds formed during the vulcanization process. The nature of these bonds is judged by the change of the modulus of the rubbers depending on the duration and temperature of vulcanization. The nature of the action of the activators is said to be under the significant effect of the type of accelerator and filler included in the composition of the systems being vulcanized (Ref.10). Various systems were investigated containing either zinc oxide or calcium hydroxide (Fig.1), as well as systems containing channel carbon black in the presence of N-morpholyl-2-benzothiazolesulfena-

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The Action of Activators Depending on the Vulcanization Temperature

mide and zinc oxide (Fig. 2a). Fig.2b shows the pattern of behavior for the vulcanizing system containing a double system of accelerators: altax +ДФГ (DFG). Fig.3 and 4 show the action of calcium hydroxide and zinc oxide with an increase in temperature of the vulcanization for mixtures based on butadiene-styrene rubber filled with a highly-dispersed furnace carbon black (ХАФ- KhAF type) and containing the accelerators sulfenamide БТ (BT) and N-cyclohexyl-2-benzothiazolesulfenamide (sulfenamide Ц-Ts). Attention is drawn to the fact that even for mixtures of natural rubber in which calcium hydroxide at the usual temperature of vulcanization is an extremely weak activator, its action (contrary to the action of zinc oxide) is characterized by a positive temperature coefficient of vulcanization according to the modulus and tear-resistance (Fig.5). The established difference between calcium hydroxide and zinc oxide in their effect on the structure of the vulcanizates is explained by the fact that calcium hydroxide is an accelerator of the vulcanization process and a structuralizing agent (Ref.10). The authors conclude that in the presence of the usually applied activator (zinc oxide) an increase in the vulcanization temperature from 143 to 163°C

The Action of Activators Depending on the Vulcanization Temperature

leads to a decrease in the modulus of the produced vulcanizates. When using calcium hydroxide and elevating the vulcanization temperature (in the same temperature interval as mentioned above) vulcanizates are obtained with elevated values of the modulus. The vulcanization of these mixtures contrary to mixtures with zinc oxide is described by kinetic curves of the modulus change not exhibiting any reversion of the vulcanization process. There are 5 sets of graphs and 13 references: 11 Soviet, 2 English.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

The Action of Activators Depending on the Vulcanization Temperature

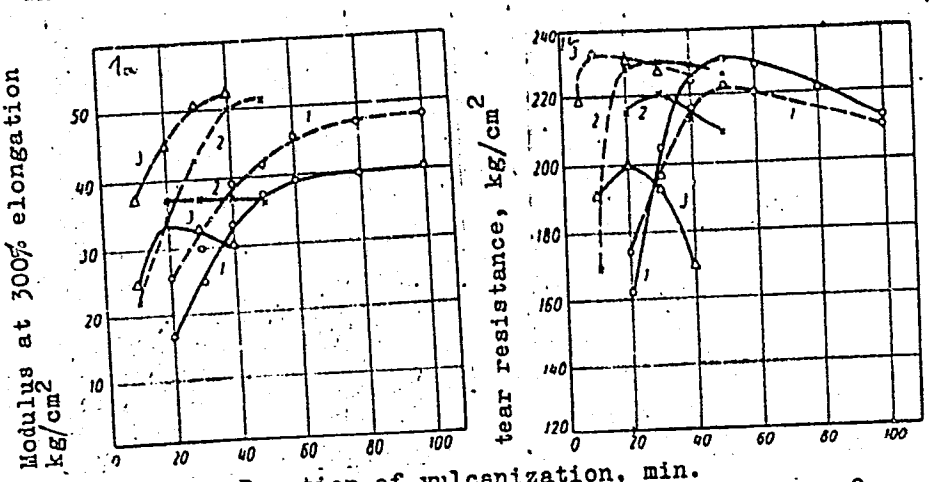

Fig.1: Effect of the activators on the kinetics of change of the modulus and tear resistance in the vulcanization of mixtures based on SKS-30 AM containing 30.0 w.p. of channel carbon black and 1.0 w.p. of sulfenamide BT. —— zinc oxide, - - - calcium hydroxide. 1 - 143°C; 2 - 153°C; 3 - 163°C.

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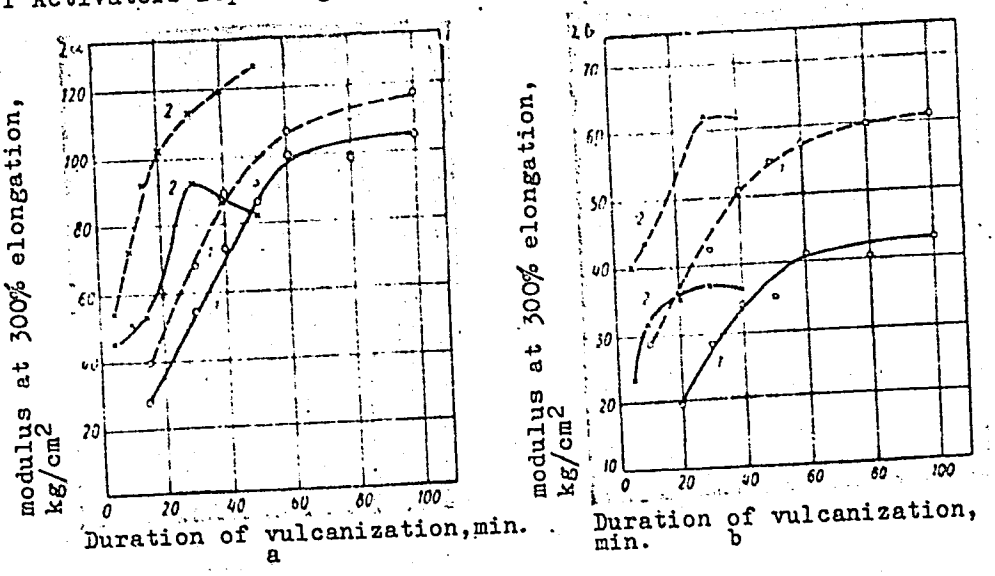
The Action of Activators Depending on the Vulcanization Temperature

Fig. 2:



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The Action of Activators Depending on the Vulcanization Temperature

Fig. 2 (continued) Effect of the activators on the kinetics of change of the modulus in the vulcanization of SKS-30 AM mixtures containing 50.0 w.p. of channel carbon black and 1.1 w.p. of sulfenamide M (a) and also 30.0 w.p. of channel carbon black and 0.6 w.p. of altax + 0.75 w.p. of DFG (b): ——— zinc oxide, - - - calcium hydroxide 1 - 143°C, 2 - 163°C.

Fig. 3 Effect of the activators on the change kinetics of the modulus and relative elongation of SKS-30 AM mixtures containing 50.0 w.p. of KhAF carbon black when these are vulcanized in the presence of 0.6 w.p. of sulfenamide BT: ——— zinc oxide, - - - calcium hydroxide, 1 - 143°C; 2 - 163°C.

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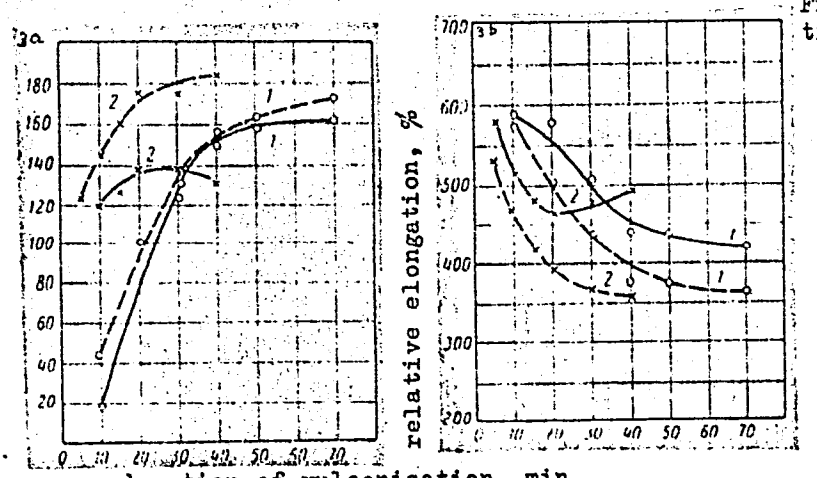
A051/A027

The Action of Activators Depending on the Vulcanization Temperature

Fig. 3 (continued)



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A051/A027

The Action of Activators Depending on the Vulcanization Temperature

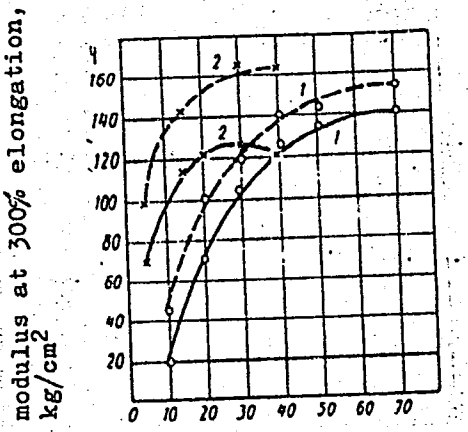

Fig. 4 Effect of the activators on the change kinetics of the modulus in the vulcanization of SKS-30AM mixtures containing 50.0 w.p. of KhAF channel carbon black and 0.6 w.p. of sulfenamide Ts: —— zinc oxide; - - - calcium hydroxide. 1 - 143°C; 2 - 163°C.

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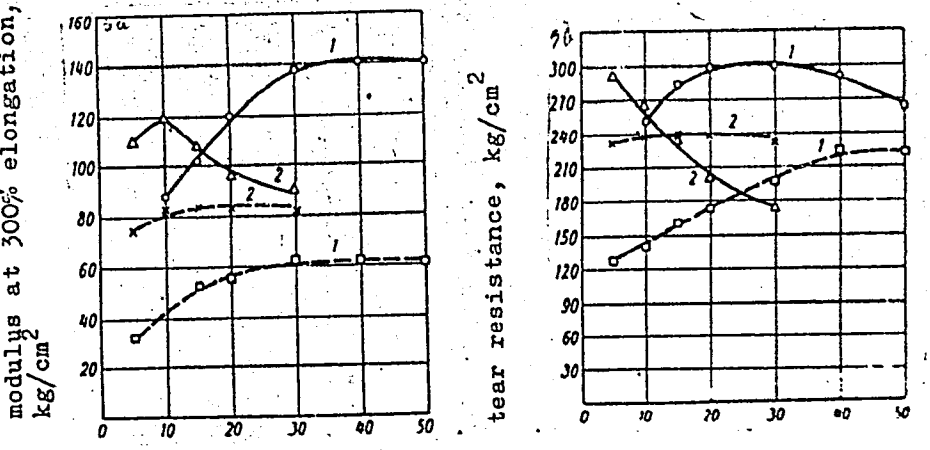
The Action of Activators Depending on the Vulcanization Temperature

Fig. 5



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A051/A027

The Action of Activators Depending on the Vulcanization Temperature

Fig. 5 (continued) Effect of the activators on the change kinetics of the modulus and tear resistance of mixtures from natural rubber containing 40.0 w.p. of KhAF carbon black in their vulcanization in the presence of 0.4 w.p. of vulcaphore BSO: ——— zinc oxide, - - - calcium hydroxide. 1 - 143°C; 2 - 163°C.

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81609

S/190/60/002/02/08/011
B004/B061

15.9120

AUTHORS: Dogadkin, B. A., Mladenov, I., Tutorskiy, I. A.

TITLE: Conversions of Carboxylated Butadiene-styrene Rubbers Under the Action of Gamma Radiation

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 2, pp. 259-264

TEXT: Carboxylated butadiene-styrene rubber with 30% of styrene, 1.30 and 1.60% of methacrylic acid; 50% of styrene and 2.88 or 5.43% of methacrylic acid were irradiated as 0.5 mm thick films in an argon atmosphere with 0.05% of oxygen from a Co^{60} source of the type K-20 (K-20), with 0.1 - 50 Mr. The following were determined on the irradiated samples: number of the remaining carboxyl groups (Fig. 1, Table 1); gel content (Fig. 2, Table 2); viscosity of the brine fraction (Fig. 3); maximum swelling in benzene or methylethylketone (Fig. 4); and the formation of cross-links (Fig. 5, Table 3). The results are as follows: Under the effect of gamma radiation a loss of carboxyl groups occurs,

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