CHIPASHVILI, V.V.

Improving the methods for erecting the bearing walls of residential buildings of medium height. Trudy Inst. stroi.mekh. i seism. AN Gruz. SSR 9:77-88 '63. (MIRA 17:12)

BAKHTADZE, I.D.; CHIPASHVILI, V.V.

Organizing prefabricated house building in the Georgian S.S.R. Trudy Inst. stroi.mekh. i seism. AN Gruz. SSR 9:123-132 '63.

(MIRA 17:12)

L 01115-66 EWT(m)/EWP(w)/EPF(c)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) IJP(c) JD

ACCESSION NR: AP5019652 UR/0369/65/001/003/0289/0292

AUTHOR: Grigor'yeva, G. M.; Namneva, O. G.; Nechay, Ye. P.; Popov, K. V.; Chipcheyeva, E. A.

TITLE: Effect of temperature and straining speed on the mechanical properties of iron that has absorbed hydrogen from air atmosphere

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 3, 1965, 289-292

TOPIC TAGS: hydrogen absorption, armco iron, hydrogen absorbing metal, mechanical strength tensile test, straining speed, yield point

ABSTRACT: Corrosionless penetration of hydrogen into steel has been observed in steel equipment in contact with petroleum during drilling as well as in the equipment in contact with air during grinding. The source of hydrogen in such cases is presumably water vapors. In this connection, the authors observed a change in the hydrogen content of iron during its exposure to air following vacuum annealing. A thorough investigation of this effect was carried out. The material investigated was armco iron in the form of flat specimens 50 mm long, 5 mm wide, die-stamped from a 1 mm thick sheet and vacuum-annealed at 930°C and cooled in a vacuum to room temperatures. The hydrogen content of the specimens was determined immediately after their removal from the vacuum furnace and at specific intervals of time following exposure to air. The findings (Fig. 1) show that in time the hydrogen content

Card 1/4

L 01115-66
ACCESSION NR: AP5019652

2

of the metal increases. The effect of the hydrogen absorbed from air on the mechanical properties of metal was investigated. To this end, tensile tests at strain rates of 60, 20, and 0.22 mm/min were performed in the temperature range of from +20 to -196°C. The hydrogen content of the tested specimens was approximately 3 ml/100 g. It was found that the position of the maximum yield point (i.e. the yield point higher than predicted by theory) depends on the rate of straining in the tensile tests: at rates of 20 and 60 mm/min it occurs at a temperature of about -120°C; as the speed decreases by two orders (0.22 mm/min) the maximum is displaced 20°C in the direction of low temperatures. The plasticity minimum shifts in the direction of low temperatures when the speeds of straining decrease, and thus it also changes nonmonotonically. In general, the mechanical properties of the metal that has absorbed hydrogen from the air atmosphere change in the same way as those of the metal that has absorbed hydrogen electrolytically, chemically, or through exposure in a hydrogen medium at high temperatures and pressures. However, in this case the stress-strain diagram has a certain distinguishing and previously not observed feature: double yield points, present for every investigated rate of straining, and attributable to the presence of hydrogen in the metal, which changes the normal course of dislocations. Orig. art. has: 4 figures, 1 table.

Card 2/4

L 01115-66
ACCESSION NR: AP5019652

2

ASSOCIATION: Institut nefte- i uglekhimicheskogo sinteza, Angarsk (Institute of Petro- and Coal-Chemical Synthesis)

SUBMITTED: 17Feb65 55 ENCL: 01 SUB CODE: MM

NR REF SOV: 006 OTHER: 007

Card 3/4

L 01115-66

ACCESSION NR: AP5019652

0

ENCLOSURE: 01

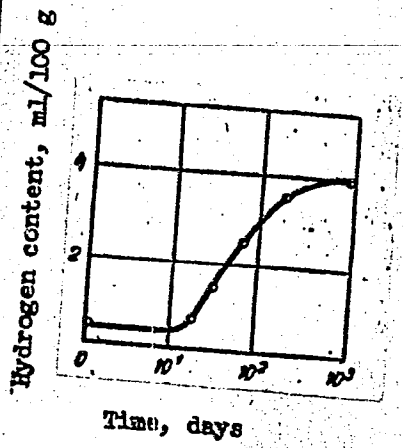


Fig. 1. Hydrogen content of iron as a function of the time of exposure to air atmosphere (circles on curve correspond to the arithmetic mean of 2-3 measurements).

Card 4/4

ACC NR: AP7004181 (A,N) SOURCE CODE: UR/0369/66/002/006/0635/0636

AUTHOR: Nosyreva, Ye. S.; Popov, K. V.; Chipcheyeva, E. A.

ORG: Institute of Petro- and Coal-Chemical Synthesis, Angarsk (Institut nefto- i uglekhimicheskogo sinteza)

TITLE: Effect of manganese on proneness to hydrogen brittleness in steel

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 6, 1966, 635-636

TOPIC TAGS: manganese, low carbon steel, hydrogen embrittlement, rupture strength

ABSTRACT: The absorption of atmospheric hydrogen by metal may in some cases involve anomalous changes in properties. This effect was investigated by means of tensile tests at from -100 to +20°C of notched specimens of two low-carbon steels, one containing 0.1% Mn and the other, 1.2% Mn, with hydrogen contents of 7 and 6 cc, respectively, per 100 g of metal. Findings: for the steel containing the minimal amount of manganese (0.1%) the variation in maximum breaking stress with temperature is anomalous: at from -80 to -60°C the maximum breaking stresses are lower than at the other temperatures. By contrast, the steel containing 1.2% Mn displays a monotonic increase in stresses with decrease in temperature. These findings indicate that the activity of hydrogen is in some manner suppressed by manganese. This phenomenon requires further investigation. Orig. art. has: 1 fig., 1 table.

SUB CODE: 13, 11/ SUBM DATE: 25Jan66/ ORIG REF: 004

Card 1/1

CHIPCHIK, D.I., mladshiy nauchnyy sotrudnik (Kiyev 50, ul.Bozhenko, d.10, kv.7)

Changes of the spine in very old people. Ortop., travm. i protez. 26 no.4:22-26 Ap '65. (MIRA 18:12)

1. Iz otdela vozrastnykh izmeneniy oporno-dvigatel'nogo apparata (zav. - kand.med.nauk Ye.P.Podrushnyak) Instituta gerontologii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. D.F.Chebotarev).

CHIPCHIN, A., kapitan militsii

Stop, red light! Za rul. 21 no.8:13 Ag '63. (MIRA 16:11)

MEDNE, K.; GRINSHTEYN, V.[Grinsteins, V.]; CHIPEN, G.[Cipens, G.]

Study of the tuberculostatic activity of 1,2,4-triazole derivatives. Vestis Latv ak no.7:85-96 '61.

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.

(TRIAZOLE) (TUBERCULOSIS)

GRINSHTEYN, V.[Grinsteins, V.]; MEDNE, K.; CHIPEN, G.[Cipens, G.]; VEVERIS, A.

Tuberculostatic activity of derivatives of aminoguanidine and diaminoguanidine and its correlation with chemical structure. Vestis Latv ak no.10:89-100 '61.

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.

(GUANIDINE) (TUBERCULOSIS)

GRINSHTEYN, V. Ya.; CHIPEN, G.I.

Derivatives of aminoguanidines and their conversions. Part 1: Synthesis of acylaminoguanidines and 3-substituted 5-amino-1, 2,4-triazoles. Zhur. ob. khim. 31 no.3:886-890 Mr '61. (MIRA 14:3)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.
(Guanidine) (Triazole)

CHIPEN, G.I. [Cipens, G.]; GRINSHTEYN, V.Ya. [Grinsteins, V.]; PREYMAN, R.P. [Preimans, R.]

Derivatives of aminoguanidine and their transformations. Part 2: Derivatives of nitroamino- and diaminoguanidines and their transformations. Zhur.ob.khim. 32 no.2:454-459 F '62. (MIRA 15:2)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.
(Guanidine)

CHIPEN, G.I. [Cipens, G.]; GRINSHTEYN, V.Ya. [Grinsteins, V.]

Derivatives of aminoguanidine and their transformations.
Part 3: Acyl and azomethine derivatives of aminotriazoles.
Zhur.ob.khim. 32 no.2:460-464 F '62. (MIRA 15:2)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.
(Triazole)

CHIPEN, G.I. [Gipens, G.]; GRINSHTEYN, V.Ya. [Grinsteins, V.]

Derivatives of aminoguanidines and their transformations. Part 4: Derivatives of 1-alkyl-1-aminoguanidines and 1-alkyl-3-substituted 1,2,4-triazoles. Zhur.ob.khim. 32 no.11:3811-3817 N '62. (MIRA 15:11)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.
(Guanidine) (Triazole)

CHIPEN, G.I.; EYDUS, Ya.A. [Eidus, J.]; BOBOVICH, Ya.S.; GRINSHTEYN, V.Ya. [Grinsteins, V.]

Structure of N-acyl derivatives of 3-phenyl-5-amino-1,2,4-triazole. Zhur. strukt.khim. 6 no.1:53-57 Ja-F '65. (MIRA 18:12)

1. Institut organicheskogo sinteza AN Latviyskoy SSR; Latviyskiy gosudarstvennyy universitet imeni P.Stuchki i Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova. Submitted October 10, 1963.

BUSEV, A.I.; RUDZIT, G.P. [Rudzits, G.]; CHIPEN, G.I.; GRINSHTEYN, V.Ya. [Grinsteins, V.]

Extraction of a complex compound of pentavalent molybdenum with thioglycolic acid in the presence of guanidine derivatives. Zhur. anal. khim. 20 no.1:76-81 '65. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, Latviyskiy gosudarstvennyy universitet imeni P. Stuchki i Institut organicheskogo sinteza AN Latviyskoy SSR.

CHIPER, Gh.

Computation d agram of hydraulic elements of channel navigation. Studii hidraul 6:159-189 '64.

H

Country : RUMANIA
Category : Chemical Technology. Chemical Products (Part 4). Leather. Fur. Gelatin. Tanning Materials. Industrial Proteins
Abs. Jour. : Ref Zhur-Khim., 1959, No 7, 25930

Author : Pavelescu, I. M.; Chiper, I.
Institut. : Research and Experimental Institute of Wood and*
Title : Procurement of Wood from Oak Stumps for the Tannin Extractive Industry

Orig. Pub. : An. Inst. cercetari si experim. ind. lemn. si hirt., 1953, No 13, [illegible]-[illegible]

Abstract : Tests were conducted on the obtaining of wood from oak stumps by means of explosives (dynamite II) to show the efficiency of this method as compared with manual and mechanized (by means of machines) methods. Specified are the conditions of the undermining of stumps, the dimensions and arrangement of the holes, the size of the charge, depending on the diameter of stumps, safety

* Paper Industry

Card: 1/3

H-170

Country : RUMANIA
Category : Chemical Technology. Chemical Products (Part 4). Leather. Fur. Gelatin. Tanning Materials. Industrial Proteins.
Abs. Journ. : Ref Zhur - Khim., No 7, 1959, No 24926
Author :
Institut. :
Title :

Orig Pub. :

Abstract : centration of SB in the mixture of SB and H_2SO_4, temperature, and the order of the introduction of the reacting substances. With a correct combination of these factors, one can prepare a reduced solution of SB with given tanning properties.-- G. Marinus

Card: 2/2

Country : RUMANIA
Category : Chemical Technology. Chemical Products (Part 4). Leather, Fur. Gelatin. Tanning Materials. Industrial Problems. H
Abs. Jour. : Ref Zhur - Khim., No 7, 1959, No 25955
Author :
Institut. :
Title :

Orig. Pub. :

Abstract : Some man, 2 m.^{3} of commercial wood (30 times greater than in manual work), and it may be doubled with the use of mechanical drilling and sawing. The wood is obtained free of earth, with dimensions and weight, acceptable for further processing.-- G. Markus

Card: 3/3

M-177

Country : ROMANIA
Category : Chemical Technology. Chemical Products (Part 4). Leather. Fur. Gelatin. Tanning Materials. Industrial Proteins
Abs. Jour. : Ref Zhur-Khim, 1959, No 7, 23932
Author : Chipor, I.; Pavelescu, I. M.; Nova, C.
Institut. : Research and Experimental Institute of Wood and*
Title : Average Yield of the Bark of White Willow Used for the Extraction of Tanning Substances

Orig. Pub. : An. Inst. cercetari si experim. ind. lem. si hirt., 1958, No 13, 195-209

Abstract : The average yield of dry bark from 1 m.^{3} of moist wood of white willow (Salix alba L.) in exploitation based on selective cutting amounts to 57.365 kg., and in that based on clearcutting, to 52.1 kg. The moisture content in dry bark is 8-12%. The bark of the first grade contains altogether 16.2% of soluble substances and 6.0% of tannides; the bark of the second grade contains

* Paper Industry

Card: 1/2

#-165

Country : RUMANIA
Category : Chemical Technology. Chemical Products, Part 4). Leather, Fur. Gelatin. Tanning Materials. Industrial Proteins. H
Abs. Jour. : Ref Zhur - Khim., No 7, 1956, No 20952
Author :
Institut. :
Title :

Orig Pub. :

Abstract : 14.4 and 2.7%, respectively; the mixture of both kinds of bark contains 10.3% of soluble substances and 7.7% of tannides. It is necessary to strip the bark in April and May, right after cutting the trees to a thickness of 2-4 cm. of the trunk on its top, in the form of rolls 1-2 m. long. The drying is done on trestles during 4-6 days.-- G. Marius

Card: 2/2

[redacted], Constantin; PETCU, Ion

Good and useful way for the Rumanian workers to spend their free time. Munca sindic 6 no.5:20-23 My '62.

1. Director al clubului Uzinele de tractoare, Brasov (for Petcu).

CHIPEV, Kh.; UZUNOVA, V.

Vaginal temperature as index of activity of the corpus luteum and in function tests of the ovaries. Khirurgiia, Sofia 6 no.4:234-240 1953. (CIML 25:1)

1. Head of Health Station at Klisura; for Chipev; Midwife at Health Station at Klisura for Uzunova. 2. Public Health Division (Head -- Dr. Velev) of District People's Soviet of Workers' Deputies, Karlovo.

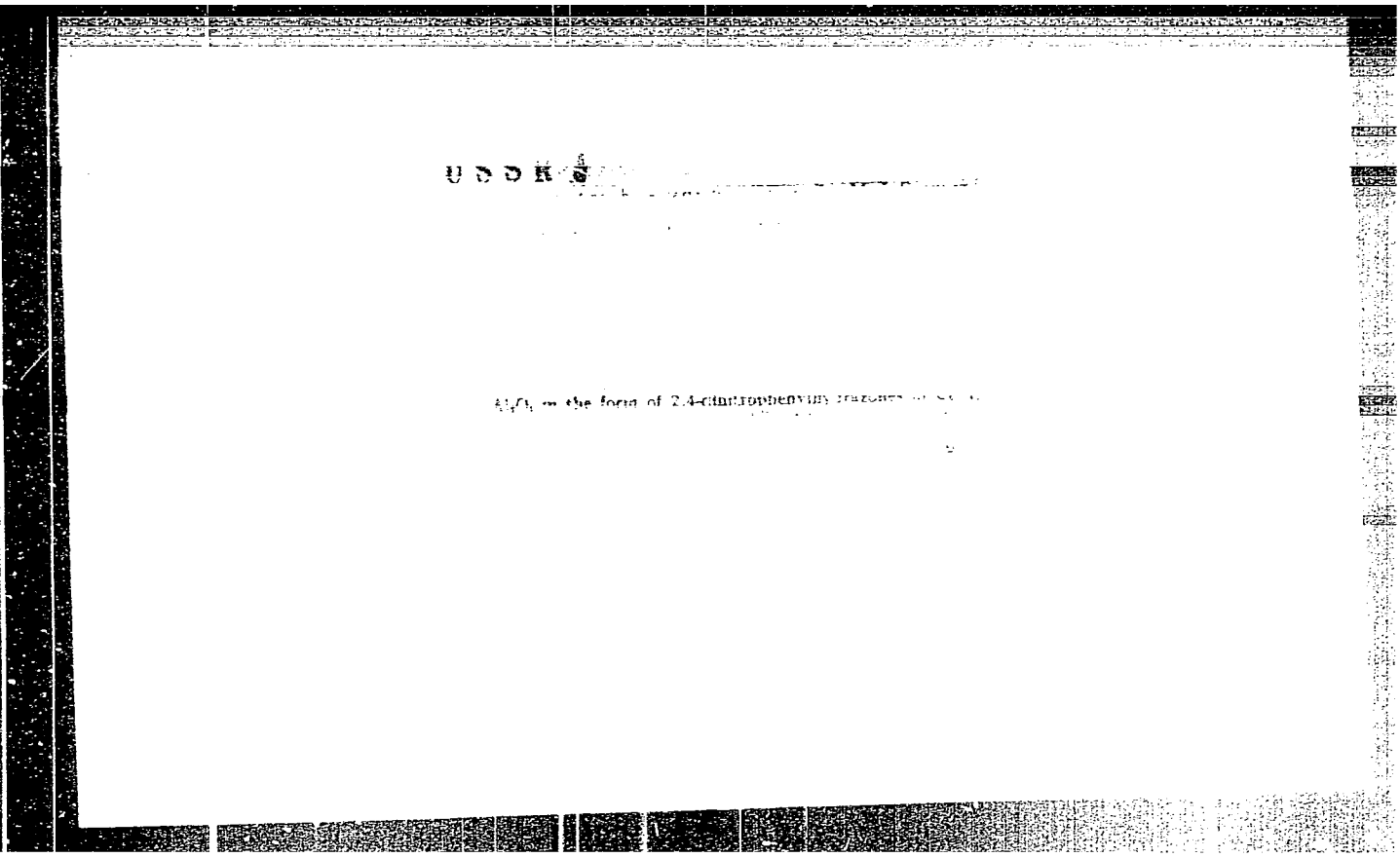
DOGANOV, Iv.; CHIPEV, Kh.

On 7 cases of gynatresia. Akush. ginek. (Sofia) 3 no.1:63-68 '64.

*

CHIPEV, Kh.N. (Sofiya)

Characteristics of the course of pregnancy and labor in multiparae.
Akush. i gin. no.2:69-70 '65.
(MIRA 18:10)



U S S R

[illegible] in the form of 2,4-dinitrophenylhydrazones [illegible]

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308820008-2"

BULGARIA

Col D. CHIPILSKI, Col K. ANTONOV and Maj T. TENEV; Medical Corps (Meditsinskata sluzhba.)

"X-Ray Studies Following Closed Cranio-Cerebral Trauma."

Sofia, Voenno Meditsinsko Delo, Vol 7, No 4, Dec 1962; pp 19-25.

Abstract [Russian summary modified]: Data on 80 patients: 46 normal and various types of residual lesions in the other 34. Of the 80, 43 were examined over 1 year (36 over 3 years) after the lesion occurred. Table, 2 rentgenograms, 16 Soviet references.

1/1

CHIPILSKI, D.

A seriograph for cerebral angiography. Khirurgiia (Sofiia) 16 no.7:657-659 '63.

1. Vissh voenno-meditsinski institut - Sofiia.
(CEREBRAL ANGIOGRAPHY)
(EQUIPMENT AND SUPPLIES)
(TECHNOLOGY, RADIOLOGIC)

L 29998-66
ACC NR: AP6020093 SOURCE CODE: BU/0017/65/020/004/0057/0058

AUTHOR: Lambov, N. (Lieutenant Colonel of the medical service); Chipilski, Khr. (Major of the medical service)

ORG: none

TITLE: Renal hypernephroma with metastases without renal symptoms

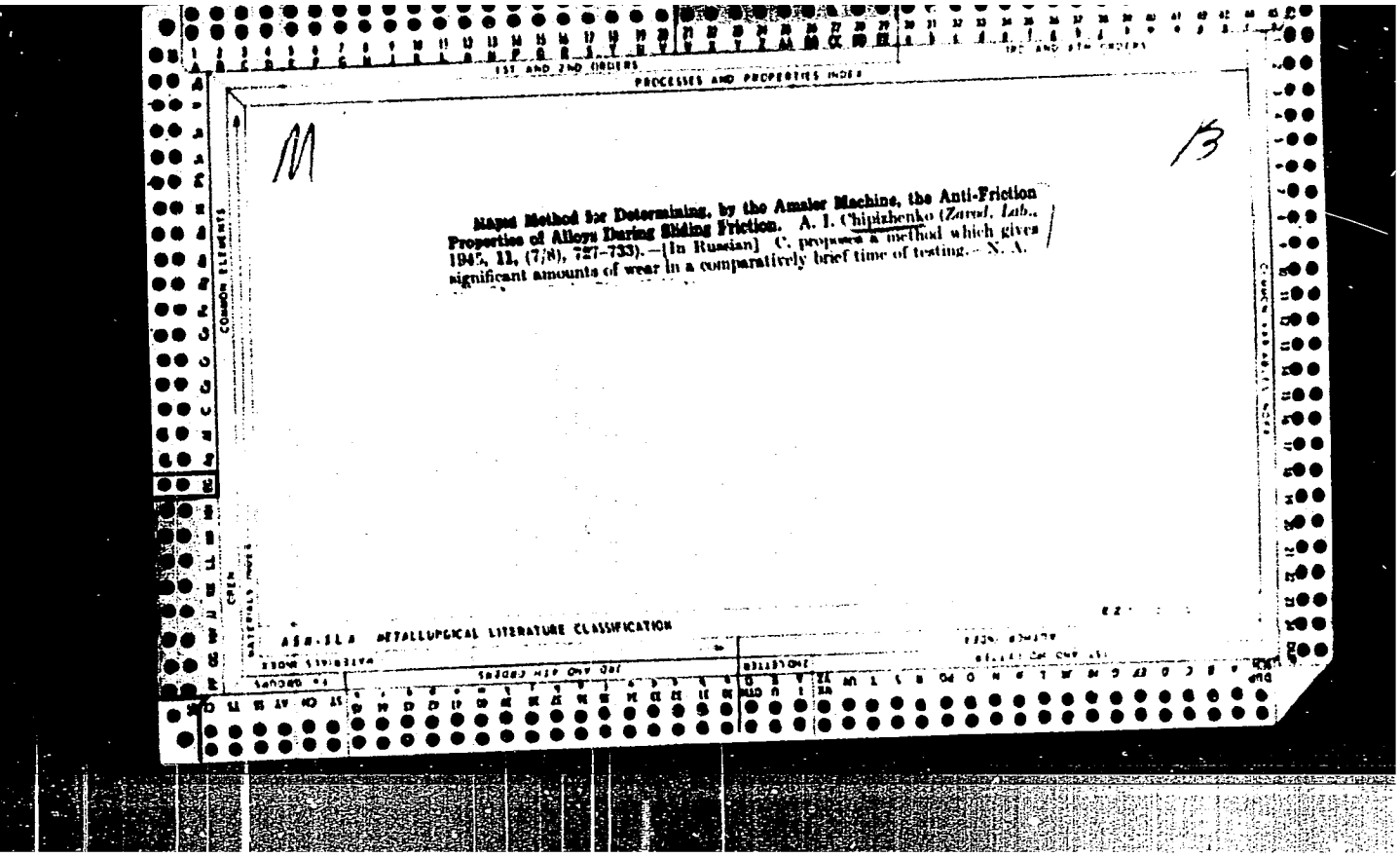
SOURCE: Voenno-meditsinsko delo, v. 20, no. 4, 1965, 57-58

TOPIC TAGS: military medicine, digestive system disease

ABSTRACT: This article presents the case of a 36-year-old officer with perplexing clinical symptoms alternately diagnosed as peptic ulcerative disease and calculous cholecystitis; melena progressively more severe, episodes of hematemesis and death despite heroic treatment short of surgery. True diagnosis of renal hypernephroma with profusely disseminated visceral metastases was a relatively unexpected finding at necropsy. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

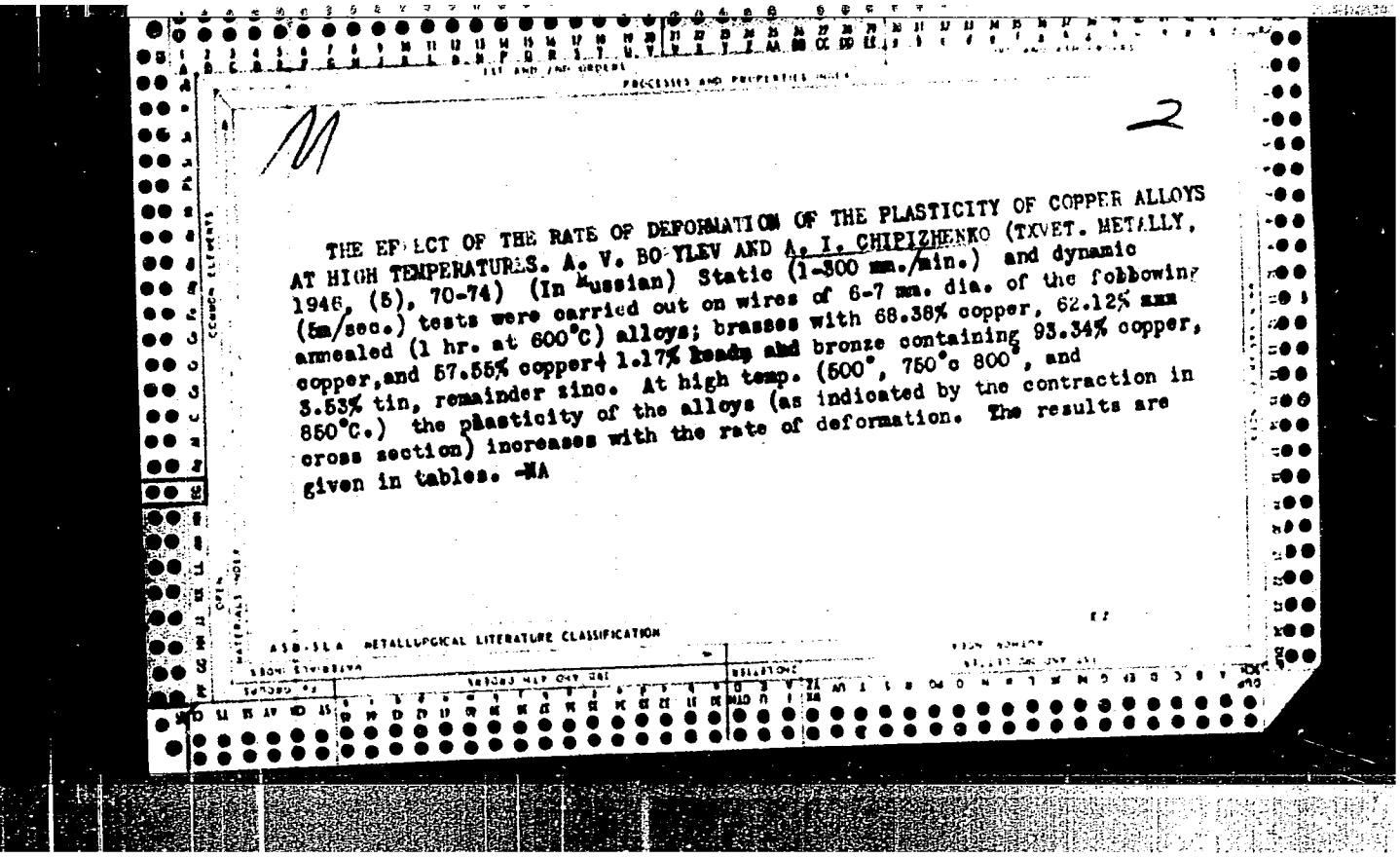


M

13

Rapid Method for Determining, by the Amsler Machine, the Anti-Friction Properties of Alloys During Sliding Friction. A. I. Chipizhenko (*Zavod. Lab.*, 1945, **11**, (7/8), 727–733).—[In Russian] C. proposes a method which gives significant amounts of wear in a comparatively brief time of testing.—N. A.

A58-81.8 METALLURGICAL LITERATURE CLASSIFICATION

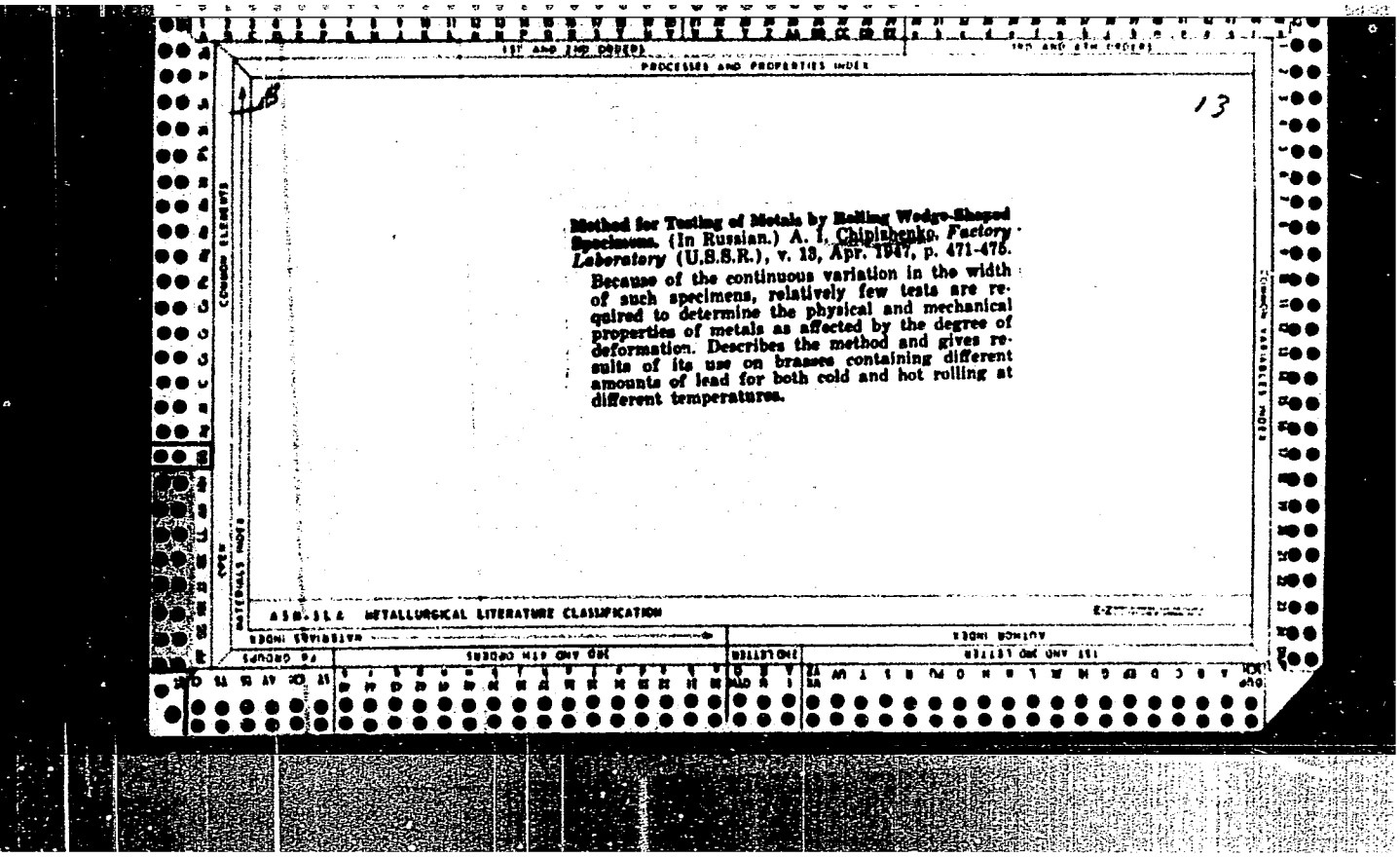


M

2

THE EFFECT OF THE RATE OF DEFORMATION ON THE PLASTICITY OF COPPER ALLOYS AT HIGH TEMPERATURES. A. V. BOGYLEV AND A. I. CHIPIZHENKO (TSVET. METALLY, 1946, (5), 70-74) (In Russian) Static (1-300 mm./min.) and dynamic (5m/sec.) tests were carried out on wires of 6-7 mm. dia. of the following annealed (1 hr. at 600°C) alloys; brasses with 68.38% copper, 62.12% copper, and 57.55% copper + 1.17% lead and bronze containing 93.34% copper, 3.53% tin, remainder zinc. At high temp. (500°, 750°, 800°, and 850°C.) the plasticity of the alloys (as indicated by the contraction in cross section) increases with the rate of deformation. The results are given in tables. -MA

A58-51A METALLURGICAL LITERATURE CLASSIFICATION



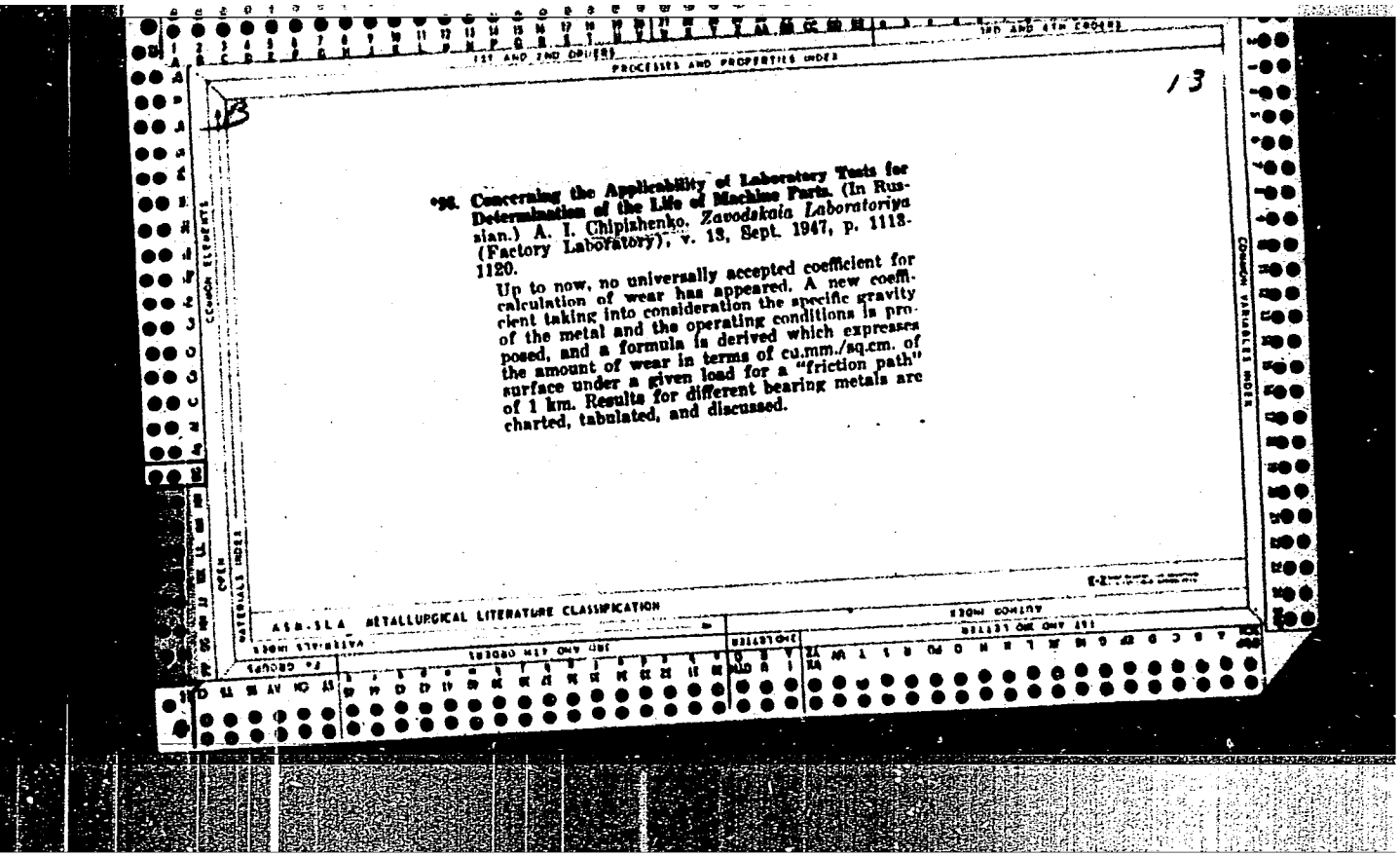
PROCESSES AND PROPERTIES INDEX

13

Method for Testing of Metals by Rolling Wedge-Shaped Specimens. (In Russian.) A. I. Chipinhenko. *Factory Laboratory* (U.S.S.R.), v. 13, Apr. 1947, p. 471-475.

Because of the continuous variation in the width of such specimens, relatively few tests are required to determine the physical and mechanical properties of metals as affected by the degree of deformation. Describes the method and gives results of its use on brasses containing different amounts of lead for both cold and hot rolling at different temperatures.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



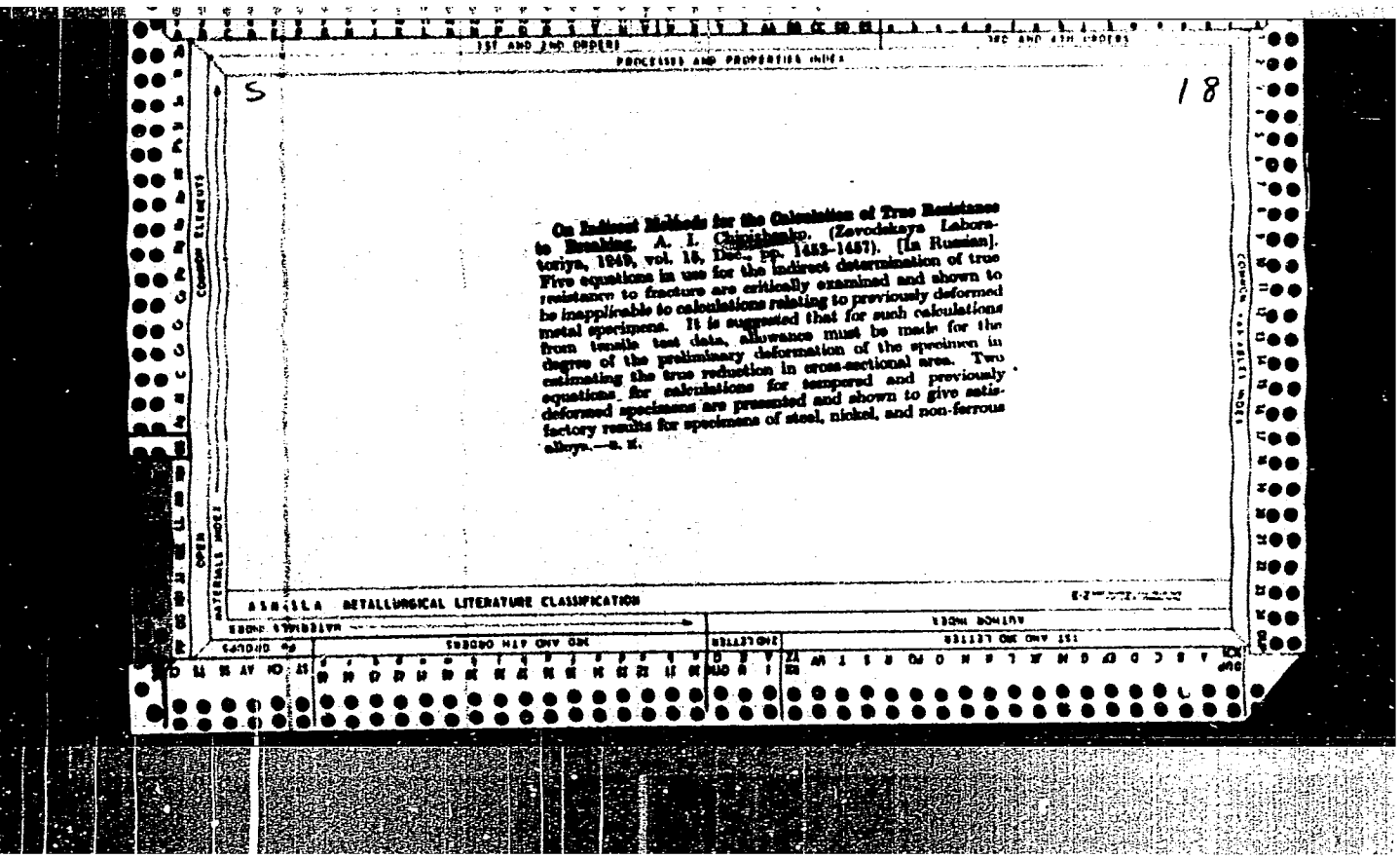
PROCESSES AND PROPERTIES INDEX

13

*98. **Concerning the Applicability of Laboratory Tests for Determination of the Life of Machine Parts.** (In Russian.) A. I. Chipishenko. *Zavodskaia Laboratoriya* (Factory Laboratory), v. 13, Sept. 1947, p. 1113-1120.

Up to now, no universally accepted coefficient for calculation of wear has appeared. A new coefficient taking into consideration the specific gravity of the metal and the operating conditions is proposed, and a formula is derived which expresses the amount of wear in terms of cu.mm./sq.cm. of surface under a given load for a "friction path" of 1 km. Results for different bearing metals are charted, tabulated, and discussed.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

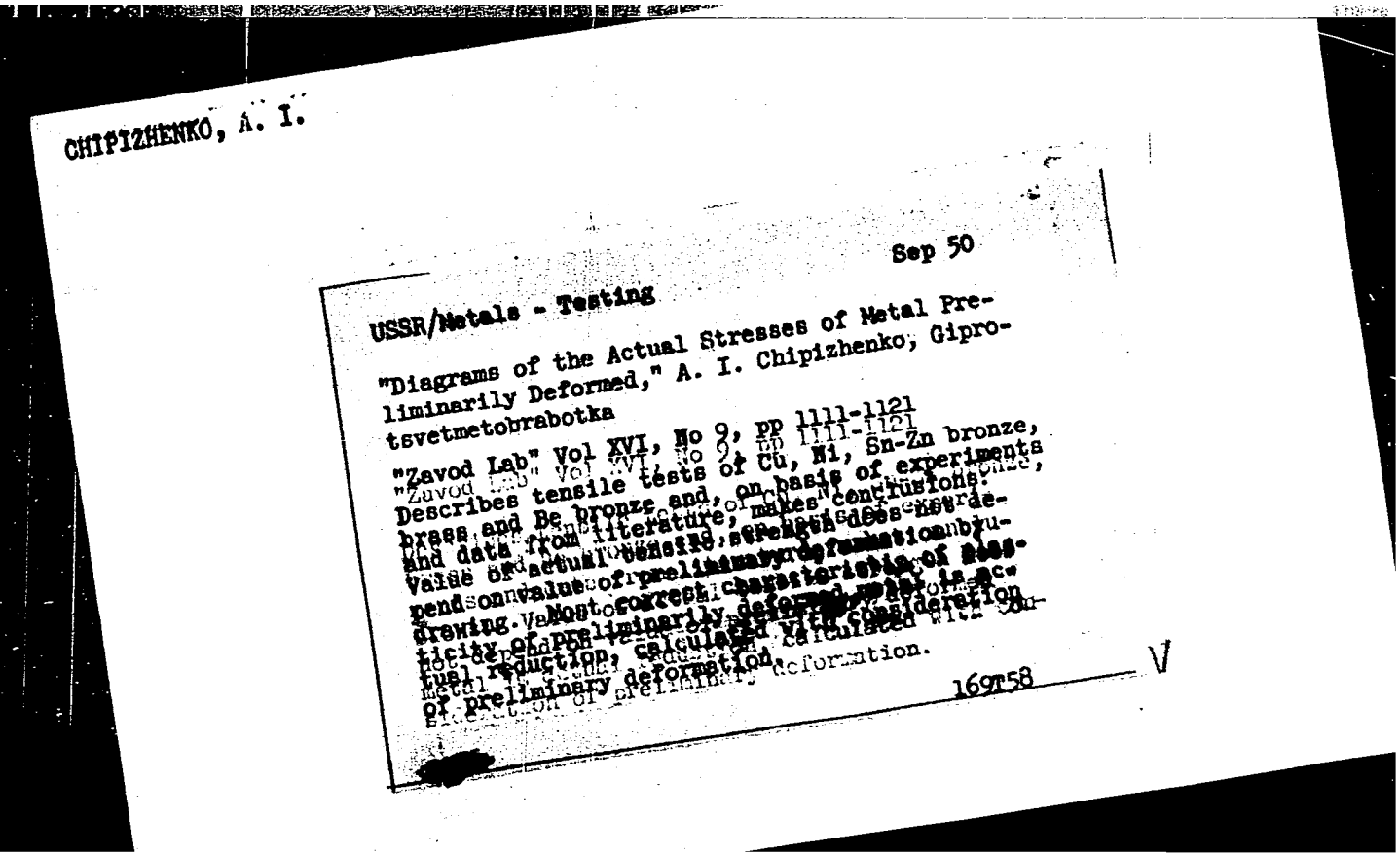


S

18

On Indirect Methods for the Calculation of True Resistance to Breaking. A. I. Chipichenko. (Zavodskaya Laboratoriya, 1949, vol. 15, Dec., pp. 1483-1487). [In Russian].
Five equations in use for the indirect determination of true resistance to fracture are critically examined and shown to be inapplicable to calculations relating to previously deformed metal specimens. It is suggested that for such calculations from tensile test data, allowance must be made for the degree of the preliminary deformation of the specimen in estimating the true reduction in cross-sectional area. Two equations for calculations for tempered and previously deformed specimens are presented and shown to give satisfactory results for specimens of steel, nickel, and non-ferrous alloys.—S. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CHIPIZHENKO, A. I.

Sep 50

USSR/Metals - Testing

"Diagrams of the Actual Stresses of Metal Preliminarily Deformed," A. I. Chipizhenko, Giprotsvetmetobrabotka

"Zavod Lab" Vol XVI, No 9, pp 1111-1121

Describes tensile tests of Cu, Ni, Sn-Zn bronze, brass and Be bronze and, on basis of experiments and data from literature, makes conclusions. Value of actual tensile stress depends on value of preliminary deformation during drawing. Most correct characteristic of plasticity of preliminarily deformed metal is actual reduction, calculated with consideration of preliminary deformation.

169T58

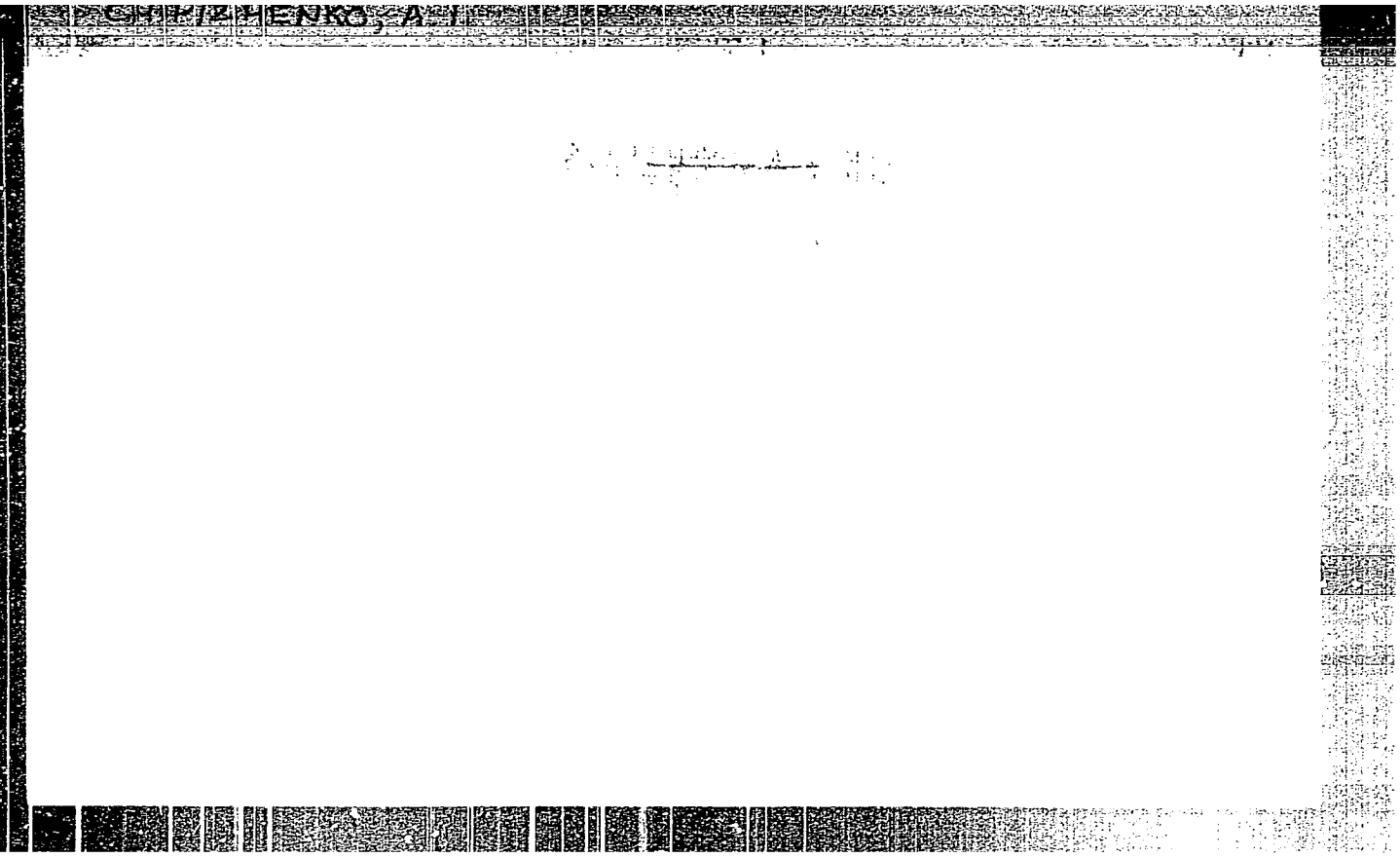
1. CHIPIZHENKO. A. I.

2. USSR (600)

4. Strains and Stresses

7. Calculation of shearing stresses. Vest. mash. no 7: Jl '52

9. Monthly List of Rusian Accessions, Library of Congress, Feb. 1953. Unclassified.



On the Relationship Between the Depth of Impression (cont.)

the main characterize the aptitude for regular deformation and do not fully reflect the ductility of the metal. The latter is best characterized by the transverse narrowing of the specimen, measurable in the rupture "neck" of a round specimen. Therefore Erichsen's method is not precise and is unsuitable for a reliable determination of the ductility of the metal and its capacity for stamping and deep drawing. In order to study the suitability for stamping it is necessary to employ methods of twisting and drawing, preferably with tools and equipment similar to those employed in production.

1. Brass--Mechanical properties 2. Brass--Fracture

V. O.

Card 2/2

CHIPIZHENKO, A.I.

137-58-5-10848

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 279 (USSR)

AUTHOR: Chipizhenko, A. I.

TITLE: New Grades of Beryllium Bronze (Novyye marki berilliyevykh bronz)

PERIODICAL: Byul. T'sentr. in-t inform. M-va tsvetn. metallurgii SSSR, 1957, Nr 7, pp 22-25

ABSTRACT: The effect of additions of Ni, Ti, and Co to standard Be bronzes of diminished Be content upon elastic hysteresis and cyclic and general strength is investigated on diaphragm-type products. Two new grades of Be bronze have been developed as a result of the investigations: Br BNT-1.9 (1.85-2.10% Be, 0.2-0.4% Ni, and 0.1-0.25% Ti, the rest Cu) and Br BNT 1.7 (1.65-1.85% Be, 0.2-0.4% Ni, 0.1-0.25% Ti, the rest Cu), distinguished by greater plasticity as compared to standard Be bronzes. The cyclic strength of springs of BNT-1.9 is 1.5 times as great as that of springs of Br B-2 bronze and twice as great as that of Br B-2.5 bronze springs. The new bronzes also exhibit more stable elastic properties and reduced elastic hysteresis at normal and elevated temperatures than do standard Be

Card 1/2

137-58-5-10848

New Grades of Beryllium Bronze

bronzes. It is noted that introduction of the new grades of Be bronze makes it possible to save 4.5-6.5 kg Be per ton of semifinished product.

E.S.

1. Beryllium bronze--Development 2. Beryllium bronze--Properties

Card 2/2

CHIPIZHENKO, A.I.; KHARITONOVA, L.D.

Effect of streaky structure in L62 brass on its mechanical and technological properties. TSvet.met. 33 no.5:66-68 My '60. (MIRA 13:7)
(Brass--Metallography)

CHIPIZHENKO, A.I.; KATYSHKOVA, A.Ya.; GOLUBKOV, M.K.

Tendency of copper-beryllium alloys to the formation of bubbles when heated in an ammonia atmosphere. Trudy Giprotsvetmetobrabotka no.18: 197-208 '60. (MIRA 13:10)
(Copper-beryllium alloys—Heat treatment)

CHIPIZHENKO, A.I.

Studying the effect of the chemical composition of beryllium bronze on the quality of springs. Trudy Giprotsvetmetobrabotka no.18:209-214 '60. (MIRA 13:10)

(Copper-beryllium alloys--Analysis)
(Springs (Mechanism))

18.1210

28547
S/137/61/000/009/019/087
A060/A101

AUTHORS: Chipizhenko, A.I., Katyshkova, A.Ya., Golubkov, M.K.

TITLE: Tendency of copper-beryllium alloys to form blisters under heating in an ammonia environment

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 9, 1961, 41, abstract 9D305 ("Tr. Gos. n.-i. i poyektn. in-ta po obrabotke tsvetn. met.", 1960, no. 18, 197-208)

TEXT: The influence of the chemical composition of bronze upon the tendency to form blisters under heating in an ammonia invironment was investigated. Strips of bronze grades Бр.Б 2.5 (Br.B 2.5) containing (in percent): Be 1.53-2.43, Ni 0.18-0.49, and admixtures of Ti 0.18-0.73 and Co 0.3; БНТ 1.9 and БНТ 1.7 (BNT 1.9 and BNT 1.7) were heated in an ammonia environment at 770-780 and 820°C (for the latter two grades) for various periods of time. It was established that standard bronze grade Br. B 2.5 is most apt to form blisters. Under heating for the period of one hour in strips with an addition of 0.28-0.73% Ti the blisters did not arise. On strips of bronze containing 1.68-2.32% Be and an admixture of Ti no blisters were formed even after a two-hour heating. Under heating of strips

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Tendency of copper-beryllium alloys ...

in a H_2 atmosphere at 820°C for 20 min no blisters were formed on strips of bronze containing an admixture of Ti with Ni, while on strips of bronze Br. B 2.5 a large number of blisters was formed. It is indicated that the formation of blisters on strips of beryllium bronze under heating in an ammonia atmosphere is connected with defects in the ingot and the action of H_2 from the surrounding environment. An admixture of Ti reduces the tendency of strips to form blisters. It is recommended to carry out the casting of beryllium bronze ingots by the semicontinuous or flowless method, and not to allow a heating $>780°C$ and long soakings in annealing strips or parts in an ammonia environment.

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

ACCESSION NR: AR4027669 S/0276/64/000/001/B069/B069

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 1B354

AUTHOR: Chipizhenko, A. I.; Iyedlinskaya, Z. M.; Korsunskaya, K. N.

TITLE: Dependence of the size and homogeneity of beryllium bronze on technological processing parameters 1963, 17-23

CITED SOURCE: Tr. Gos.n.-i. i proyektn. in-ta splavov i obrabotki tsvetn.met.v21,

TOPIC TAGS: bronze, beryllium bronze, grain size, alloy homogeneity, alloy grain size

TRANSLATION: The authors report that the furnaces used in plants for the heating of beryllium bronze in an ammonia atmosphere, as well as shaft furnaces, do not provide uniform heating of the metal. This excludes the possibility of obtaining a homogeneous structure and consistent mechanical properties in the finished products. The high-quality heating of bronze requires the use of short-term heating in continuous furnaces. The most homogeneous structures and properties of bronze may be obtained through rolling with reduction not less than 65% (with rolling performed prior to tempering). 16 illustrations. Bibliography

Card 1/1

ACCESSION NR: AR4018280 S/0277/64/000/001/0016/0017

SOURCE: RZh. Mashinostroitel'ny*ye materialy*, konstruktsii i raschet detaley masin. Gidroprivod (Hydrodrive), Abs. 1.48.97

AUTHOR: Kharitonova, L. D.; Chipizhenko, A. I.

TITLE: A new spring alloy for work at 20--350° temperatures

CITED SOURCE: Tr. Gos. n.-i. i proyektn. in-ta splavov i obrabotki tsvetn. met., vy*p. 21, 1963, 7-11

TOPIC TAGS: spring alloy, 350C temperature, current-carrying spring, relaxation resistance

TRANSLATION: An alloy developed for use in current-carrying springs of brand TAN 5-2-1 is made of Ni + 5% Ti + 2% Al + 1% Nb, having high relaxation resistance and suitable for devices operating at temperatures up to 350C. The alloy has good technological properties and is simple to work mechanically and thermally.

DATE ACQ: 07Feb64 SUB CODE: ML ENCL: 00

Card 1/1

ACC NR: AP5028552 SOURCE CODE: UR/0286/65/000/020/0167/0167

INVENTOR: Chipizhenko, A. I.; Iodlinskaya, Z. M.; Golubkov, M. K.; Bliznyukova, N. Yu.

ORG: none

TITLE: Copper-base alloy. Class 40, No. 160827

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 167

TOPIC TAGS: copper alloy, zinc containing alloy, nickel containing alloy, aluminum containing alloy, manganese containing alloy, silicon containing alloy, high strength alloy, copper base alloy, tensile strength

ABSTRACT: This Author Certificate introduces a copper-base alloy containing nickel, aluminum, manganese, and zinc. To increase the tensile strength and relaxation strength of the alloy, the component contents are kept within the limits: copper 73.0—76.0%, nickel 1.5—3.0%, aluminum 1.5—3.0%, manganese 0.3—1.0%, silicon 0.3—10%, and balance zinc.

[DV]

SUB CODE: 11/ SUBM DATE: 30Jul63/ ATD PRESS: 4170

Card 1/1

UDC: 669.35.5.71

PAULLER, O.F.; CHIPIZUBOVA, P.A.

Materials on the ecology of the fleas of the Daurian suslik in Transbaikalia. Izv. Irk.gos.nauch.-issl.protivochum.inst. 17: 161-179 '58. (MIRA 13:7)
(TRANSBAIKALIA--FLEAS) (PARASITES--SUSLIKS)

ZHOVTYY, I.F.; YEMEL'YANOVA, N.D.; FEDOROVA, L.V. [deceased]; RYZHUK, T.I.; LEONOV, Yu.A.; SUCHEVSKIY, P.T.; MOSKALENKO, V.V.; KOZLOVSKAYA, O.L.; DEMIDOVA, A.A. [deceased]; ANIKEYEV, I.K.; CHIPIZUBOVA, P.A.; PROLIP'YEV, V.N.

Materials for a study of the trombiculid mites of Siberia and the Far East. Izv.Irk.gos.nauch.-issl.protivochum.inst. 16: 156-172 '57. (MIRA 13:7)

(SIBERIA, EASTERN--MITES)

CHIPKIN, V.V., kand.tekhn.nauk

Monorail transportation. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 16 no.4:89-93 '63. (MIRA 16:8)
(Railroads, Single-rail)

GUREVICH, Viktor Zalmanovich; DEMIDOV, Nikolay Alekseyevich; CHIPKOVA, V.G., inzh., retsenzent; MINDIN. G.P., kand. tekhn. nauk, nauchn. red. ALESHIN,N.I.,inzh.,red.;CHFAS,M..A, red.

[Electric heating installations of ships] Sudovye elektronagrevatel'nye ustroistva. Leningrad, Sudostroenie, 1965. 243 p. (MIRA 18:8)

CHIPLAKOV,M.; NAPUKH,Z.

Sports festival of Kharkov tractor builders. Sov.profsoiuzy 3 no.8:43-45 Ag'55. (MLRA 8:10)

1. Predsedatel' soveta fizkul'tury Khar'kovskogo traktornogo zavoda (for Chiplakov) 2. Zaveduyushchiy uchebno-sportivnym otdelom TSentral'nogo soveta DSO "Torpedo" (Kharkov--Sports)

CHIPLAKOVA, T.P.; FOKICHEVA, R.A.

Traumatic dislocation of the crystalline lens. Sbor. nauch. trud. SOGMI no.14:130-134 '63. (MIRA 18:9)

1. Iz kafedry glaznykh bolezney Severo-Osetinskogo meditsinskogo instituta (zav. kafedroy - prof. M.N. Bugulov).

S/081/61/000/020/002/089
B119/B147

AUTHORS: Chiplis, I. V., Glembotskiy, I. I.

TITLE: Approximate single-electron wave functions of Th^+, obtained on the basis of the statistical Thomas-Fermi model

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 8, abstract 20B52 (Tr. AN LitSSR, B, 1(24), 1961, 75 - 84)

TEXT: The single-electron wave functions of Th^+ optical electrons in the states, 5f, 6d, 6f, 7s, 7p, 7d, 8s, 8p, 9s, 9p were obtained with the aid of the Thomas-Fermi potential. It is assumed that the optical-electron states do not affect the potential which is taken to be equal for all optical electrons. The equation was solved by means of a computer with an accuracy corresponding to the approximation of the chosen potential. The single-electron states in Th^+ provide a satisfactory qualitative description of the wave functions obtained. [Abstracter's note: Complete translation.]

Card 1/1

86829

S/020/60/135/005/017/043
B019/B067

24.4500

AUTHORS: Vizbarayte, Ya. I., Chiplis, V. I., and Yutsis, A. P., Academician of the AS Litovskaya SSR

TITLE: Selection Rules of Electron Transition in Various Types of Coupling

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5, pp. 1101-1103

TEXT: The authors studied electrical single-electron multipole transitions with configuration $l^q l'$, where an LS coupling exists in the l^q shell. It is assumed that this shell is characterized by the quantum numbers $L_o S_o$, which together with the single-electron momenta l's' of various types of coupling give the momentum J. Besides the known LS and Jj couplings, the Jl and LS_o couplings introduced by Racah et al. (Ref. 1) and A.M. Gutman et al. (Ref. 2) are of importance. These couplings are characterized by the intermediate quantum numbers $T_1 T_2$. Thus, the state under consideration

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Selection Rules of Electron Transition in Various Types of Coupling

S/020/60/135/005/017/043
B019/B067

is characterized by $nl^q\alpha_0 L_0 S_0 n'l'T_1T_2JM$. The transitions

$$S(nl^q\alpha_0 L_0 S_0 n'l'T_1T_2J,\ nl^q\alpha_0 L'_0 S'_0 n''l''T'_1T'_2J') =$$

$$= |(\alpha_0 L_0 S_0 n'l'T_1T_2J \| T^{(k)} \| \alpha_0 L'_0 S'_0 n''l''T'_1T'_2J')|^2 \qquad (1)$$

are studied, and the selection rules for the transition

$$l^q\alpha_0 L_0 S_0 l'T_1T_2J - l^q\alpha_0 L_0 S_0 l''T'_1T'_2J'$$

are summarized in Table 1. These ten selection rules are divided into five groups the first two of which are known. The three other groups comprise new selection rules. According to these selection rules, transition may occur only if the corresponding quantum number and the quantum numbers of the other configurations form a triangle or quadrangle. Important consequences of these new selection rules are discussed. There are 1 table and 4 references: 2 Soviet and 2 US.

ASSOCIATION: Institut fiziki i matematiki Akademii nauk LitSSR (Institute of Physics and Mathematics of the Academy of Sciences Litovskaya SSR)

Selection Rules of Electron Transition in Various Types of Coupling

S/020/60/135/005/017/043
B019/B067

SUBMITTED: August 22, 1960

Правила отбора для перехода $l^q a_0 L_0 S_0 l'' T_1 T_2 J - l^q a_0 L_0 S_0 l''' T_1' T_2' J'$

1	2	3	4	5
$LS-LS$	$J_l - J_l$	$LS - Jl$	$LS_0 - LS_0$	$Jl - Jl$
$LS - L'S'$	$J_0 l' - J_0' l''$	$LS - J_0 l''$	$LK - L'K'$	$J_0 K - J_0' K'$
$\{LL'k\}$ $\{SS'O\}$	$\{J_0 J_0' 0\}$ $\{j' j'' k\}$	$\{J_0 l' s' J\}$ $\{SL_0 l'' J'\}$ $\{L\}\{j''\}$	$\{LL'k\}$ $\{KK'k\}$	$\{KK'k\}$ $\{J_0 J_0' 0\}$
6	7	8	9	10
$LS - LS_0$	$LS - Jl$	$Jl - LS_0$	$LS_0 - Jl$	$Jl - Jj$
$LS - L'K$	$LS - J_0 K$	$J_0 K - LK'$	$LK - J_0 l''$	$J_0 K - J_0' j''$
$\{LL'k\}$ $\{SL'J'\}$ $\{K\}$	$\{LKS_0 k\}$ $\{J_0 l' s' J\}$ $\{SL_0 l'' J'\}$	$\{KK'k\}$ $\{J_0 l'' K'\}$ $\{L\}$	$\{J_0 l' K\}$ $\{L\}\{j''\}$	$\{J_0 J_0' 0\}$ $\{K\}\{j''\}$

Card 3/3

Chiplonkar, M.; Kulkarni, p.

Seasonal variation of twilight intensity. In English. p. 182.

BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA, Praha, Czechoslovakia, Vol. 10, no. 5, Sept. 1959.

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, no. 10, 1959. Oct. Uncl.

CHIPPING, G. A.

KRYZHANOVSKAYA, Ariadna Borisovna [Kryzhanivs'ka A.B.]; CHIPPIN, G.O. [Chippin, H.O.], kand.tekhn.nauk, red.; SHTUL'MAN, I.F., red. izd-va; ZHUKOVSKIY, A.D.[Zhukovs'kyi, A.D.], tekhn.red.

[Long-range forecasting of the Dnieper runoff] Dovhoterminovi prohnozy kharakterystyk stoku Dnipra. Kyiv, Vyd-vo Akad. nauk URSR, 1957. 87 p. (MIRA 11:4)
(Dnieper River)

Chipping, G.A.

SHVETS', G.I.; CHIPPING, G.A., kandidat tekhnichnikh nauk, vidpovidal'niy redaktor; SHTUL'MAN, I.F., redaktor vidavnitstva; ZHUKOVS'KIY, A.D., tekhnichniy redaktor.

[Dnieper run-off below Kiev] Stik Dnipra nyzhche Kyieva. Kyiv, Vyd-vo Akad.nauk URSR, 1957. 126 p. (MIRA 10:11)
(Dnieper River)

CHIPPING, Galina Aleksandrovna [Chippinh, H.O.]; LYSENKO, Klara Arkhipovna; VISHNEVSKIY, P.F. [Vyshnevs'kyi, P.F., kand.tekhn.nauk, otv.red.; PECHKOVSKAYA, O.M. [Piechkovs'ka, O.M.], red.izd-va; MATVIYCHUK, O.O., tekhn.red.

[Annual and minimum discharge of rivers in the Ukraine] Richnyi ta minimal'nyi stik na terytorii Ukrainy. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 145 p. (MIRA 13:3)
(Ukraine--Rivers)

VISHNEVSKIY, Palladiy Fedorovich[Vyshnevs'kyi, P.F.]; DROZD, Nafanail Iosipovich; ZHELEZNYAK, Iosif Aronovich; KRYZHANOVSKAYA, Ariada Borisovna[Kryzhanivs'ka, A.B.]; KUBYSHKIN, Georgiy Pimenovich[Kubyshkin, H.P.]; LYSENKO, Klara Arkhipovna; MOKLYAK, Vladislav Ivanovich; CHIPPING, Galina Aleksandrovna [Chippinh, H.O.]; SHVETS, Grigoriy Ivanovich[Shvets, H.I.]; PECHKOVSKAYA, O.M.[Pechkovs'ka, O.M.], red.izd-va; RAKHLINA, N.P., tekhn. red.

[Hydrologic calculations for rivers of the Ukraine]Gidrologichni rozrakhunky dlia richok Ukrainy; pry vidsutnosti sposterezhen'. [By]P.F.Vyshnev'kyi ta inshi. Kyiv, Vyd-vo Akad.nauk URSR, 1962. 385 p. (MIRA 16:2)

(Ukraine--Rivers)

TOMESCU, D., candidat in stiinte tehnice; CHIPRIADE, Ch., ing.; MITROI, C., ing.

Basic principles of flux repair organization for engines and tractors at the repair stations. Mec electrif agric 9 no.5: 8-18 '64.

1. Research Institute for Mechanization of Agriculture (for Mitroi).

05440
SOV/120-59-3-12/46

AUTHORS: Dmitriyev, A. B., Vorob'yev, M. G., Kosmarskaya, L.G. and Chipurenko, N. I.

TITLE: The Construction of Boron Ionization Chambers (Konstruktsiya bornykh ionizatsionnykh kamer)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 3, pp 59-62 (USSR)

ABSTRACT: A description is given of the following ionization chambers, all of which are designed to detect slow neutrons from the ionization due to the reaction $B^{10}(n,\alpha)Li^7$: the KN series (filled with BF_3), the KNT series (solid boron and argon gas) and the KNK series (compensated for the effect of the γ-background). 1) The KN-50 chamber. Fig 1 shows a photograph of this chamber. The electrodes consist of four coaxial tubes, 12, 22, 32 and 42 mm in diameter, made from nickel foil, 0.1 mm thick, and in electrical contact with each other. It is filled with BF_3 gas at 600 mm Hg, the working volume being 370 cm^3. The gas is obtained from the reaction $Ba(BF)_4 \rightarrow 2BF_3 + BaF_2$.

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The Construction of Boron Ionization Chambers

Fig 3 gives the volt-ampere characteristics of the chamber when the latter was irradiated in the reactor channel. The saturation current at 500 V is 0.045 μamp/cm^3.

2) The KNT-52 chamber. This chamber is in the form of a two-electrode system placed in a hermetically sealed steel cylinder. The cylinder is filled with argon at a pressure of 6 atm. Each electrode (Fig 4) consists of 30 discs, 43 mm in diameter, placed parallel to each other. The discs have slots through which supports for electrodes of opposite sign can be inserted. The distance between the plates of opposite signs is 1.6 mm and the disc thickness is 0.4 mm. Boron is deposited on either side of each disc (except for the end discs), the total area covered in this way being 950 cm^2. The insulation of the terminals at 300°C is 10^9 Ohms. Amorphous boron is used. The argon gas is 0.001% pure. The electrical characteristics of the chamber were described by Dmitriyev (Ref 3). The working voltage is 500 V and the working current 350 μamp. The absolute sensitivity of the chamber was found to be

The Construction of Boron Ionization Chambers

2×10^{-14} amp/neutron/cm^2 sec.
3) The KNK-53 and KNK-52 chambers. The counters belonging to the KNT series have an appreciable sensitivity to γ-radiation. Thus, for example, the KNT-52 counter has a γ-sensitivity of 3×10^{-11} amp/r/hr. To reduce this γ-ray sensitivity the KNK series uses an additional compensating ionization chamber which is not neutron sensitive. The basic design of the chamber and the appropriate connections are shown in Fig 5 in which 1 is the envelope, 2 is the high voltage electrode of the γ-compensating part of the chamber, 3 is the high voltage electrode of the boron part of the chamber, 4 is the collecting electrode, 5 is the boron deposit and 6 is the measuring instrument. The electrode assembly of the KNK-53 counter consists of a system of alternate boron and compensating sections. Each electrode consists of a collection of discs, 43 mm in diameter. Fig 6 illustrates this scheme and Fig 7 shows a photograph of the electrode assembly. There is a total of 164 discs and the area of the boron covered discs is 1750 cm^2. A mixture of He + 1% N_2 at 6 atm is used

The Construction of Boron Ionization Chambers

as the working gas. The nitrogen enables the breakdown voltage to be increased to 2 kV. The sensitivity of γ-radiation is found to be 3.4×10^{-13} amp/r/hr, while the sensitivity to slow neutrons is 4×10^{-14} amp/neutron/cm^2 sec. Yu. G. Nikolayev suggested the KNK-52 chamber. The KNK-52 is very similar to the KNK-53 except for the fact that the distribution of the boron and the compensating cells is asymmetric so that the sensitivity of the electrode system to γ-radiation depends on the geometry of the radiation field.
There are 7 figures and 3 Soviet references.

SUBMITTED: April 4, 1958

Card 4/4

CHIPVINSKIY, P. N.

23993 CHIPVINSKIY, P. N. Petrograficheskaya kharakteristika khoperskikh tretichnykh i melovykh peschanikov i peskov. Problemy sov. pochvovedeniya, SB. 15, 1949, S. 168-173. -- Bibliogr: 5 Nazv.

SO: Letopis, No. 32, 1949.

CHIPYZHENKO, M.A., slesar'

Unit for bending large-diameter pipes. Suggested by M.A. Chipyzhenko. Rats.i izobr.predl.v stroi. no.8:117-118 '58. (MIRA 13:3)

1. Mekhanicheskiy tsekh Promkombinata.
(Pipe bending)

CHIRA, A.

Photocolorimetric determination of small copper quantities in zinc and cadmium by means of sodium diethyldithiocarbamate. Rev chimie Min petr 13 no.8:494 Ag '62.

CHIRA, A.; BINKITS, B.; VOICULESCU, A.

Spectral analysis of crude zinc. Rev chimie Min petr 15 no.6: 352-353 Je '64.

CIUCA, A.; CRESIN, Vl. J.; CHIRA, Al. (Rumanian)

Duration and Life Expectation in Old People in Various Conditions

Gerontalogy, 6th International Congress, Copenhagen, Denmark
11-16 August 1963

CZECHOSLOVAKIA

Eugen CHIRA, Arboretum of Slovak Academy of Sciences, CSAV, Mlynany.

"Rapid Method of Determining Pollen Viability in Some Species of Pinus."

Bratislava, Biologia, Vol 18, No 5, 1963; pp 390-395.

Abstract [German summary modified]: Rapid reliable test based on total dehydrogenase content determination permits dividing pollen into viable, decreasing in vitality, and dead. Two photomicrographs, graph; 2 Soviet and 2 Western references.

1/1

CHIRA, Eugen, inz.

Problem of the pollen sterility of the Scotch pine (Pinus silvestris L.) and black pine (Pinus nigra Arnold). Les cas 9 no.9:821-826 S'63.

1. Ceskoslovenska akademie ved, Arboretum Mlynany.

CHIRA, Eugon, inz.

Effect of temperature on the germination of fresh pine pollen, and pollen stored for one year. Les cas 10 no.11:1003-1010 N '64.

1. Arboretum of the Slovak Academy of Sciences, Mlynany.

L 33571-66

ACC NR: AP6025032 SOURCE CODE: CZ/0049/65/000/009/0641/0653

AUTHOR: Chira, Eugen (Engineer, Candidate of sciences; Slepcany)

ORG: Arboretum Mlynany, SAV, Prague

TITLE: Biological questions concerning Picea excelsa (Lam.) link pollen

SOURCE: Biologia, no. 9, 1965, 641-653

TOPIC TAGS: plant development, plant reproduction, plant morphology, cytology, heat biologic effect

ABSTRACT: Thorough study of the effect of temperature and other atmospheric parameters on the development of pollen mother cells in the common spruce tree; pollen development did depend quite closely on temperature but some short-term variations were tolerated well. Comprehensive details on size and cytomorphology. Orig. art. has: 18 figures and 2 tables. [Orig. art. in Eng.] [JPRS: 33,539]

SUB CODE: 06 / SUBM DATE: 27Feb65 / ORIG REF: 005 / OTH REF: 007

Card 1/1 PB

0196 0197

L 37049-66

ACC NR: AP6027020 SOURCE CODE: CZ/0049/65/000/008/0600/0609

AUTHOR: Chira, Eugen (Engineer; Candidate of sciences; Slepcany); Berta, Frantisek (Graduate chemist; Slepcany)

ORG: Mlynany Arboretum, SAV (Arboretum Mlynany SAV)

TITLE: One of the reasons for the impossibility of hybridization of the genus Pinus

SOURCE: Biologia, no. 8, 1965, 600-609

TOPIC TAGS: carbohydrate, plant chemistry, plant reproduction

ABSTRACT: The sugar and starch content of pollen changes from year to year. The total sugar content of the pollen of individual pines varied between 6.60 and 16.34%. The following sugars were found: Rhamnose, maltose, saccharose, galactose, glucose, sorbose, fructose and Xy (X= an unknown sugar). In the nucellus of the pine the following sugars were identified: maltose, saccharose, glucose, sorbose, fructose, Xy, galactose, ribose, rhamnose, and X (X = 5 different unknown sugars). Systematically related kinds of pines have similar sugar content . Germination tests showed that some of the sugars at a concentration of 0.01% or above inhibit or stimulate the germination process of the pollen. This is considered to inhibit hybridization of pines. Ori . art. has: 3 figures and 3 tables. [ERS]

SUB CODE: 06 / SUBM DATE: 15Feb65 / ORIG REF: 006 / OTH REF: 001
OTH REF: 006

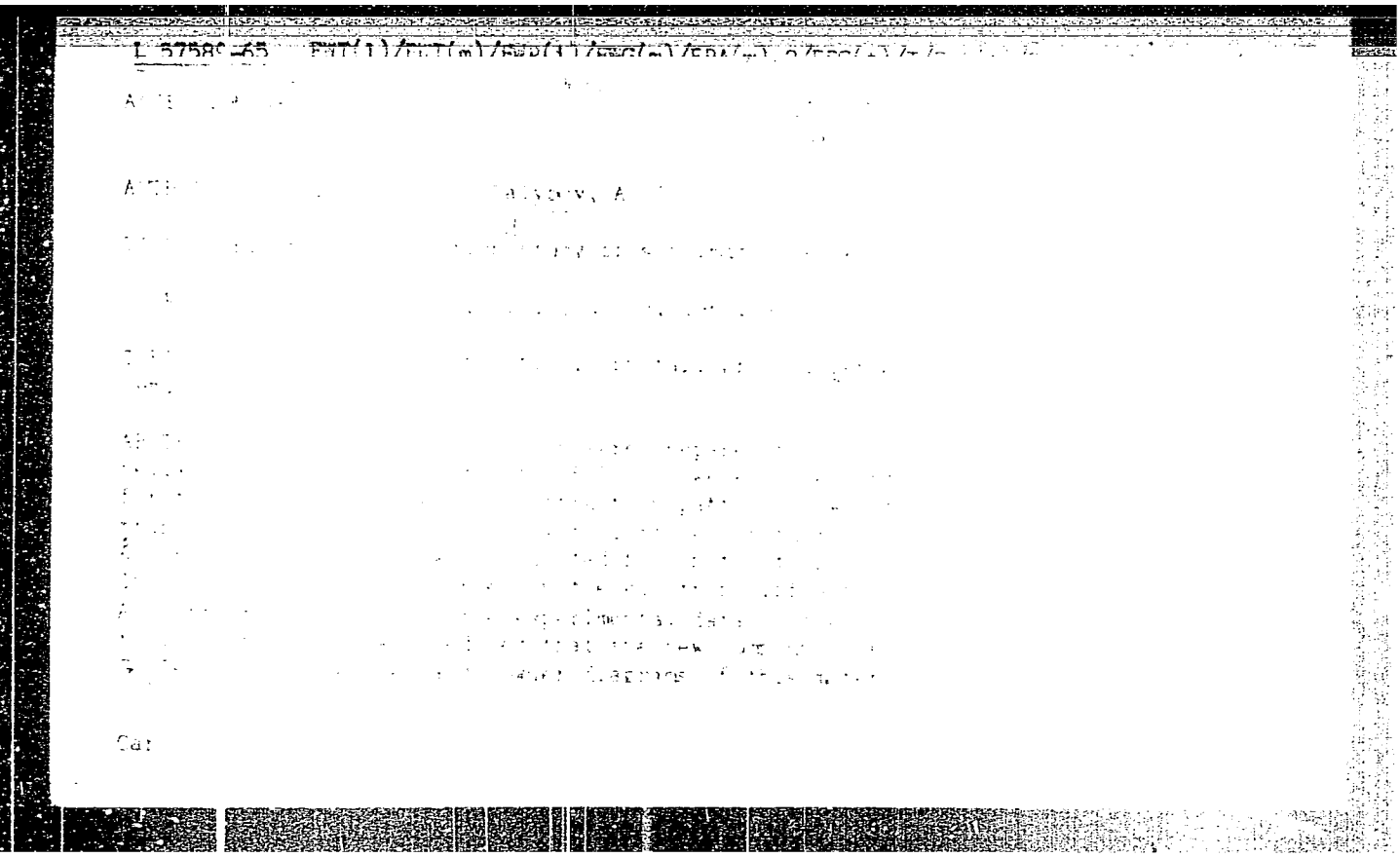
Card 1/1 LS

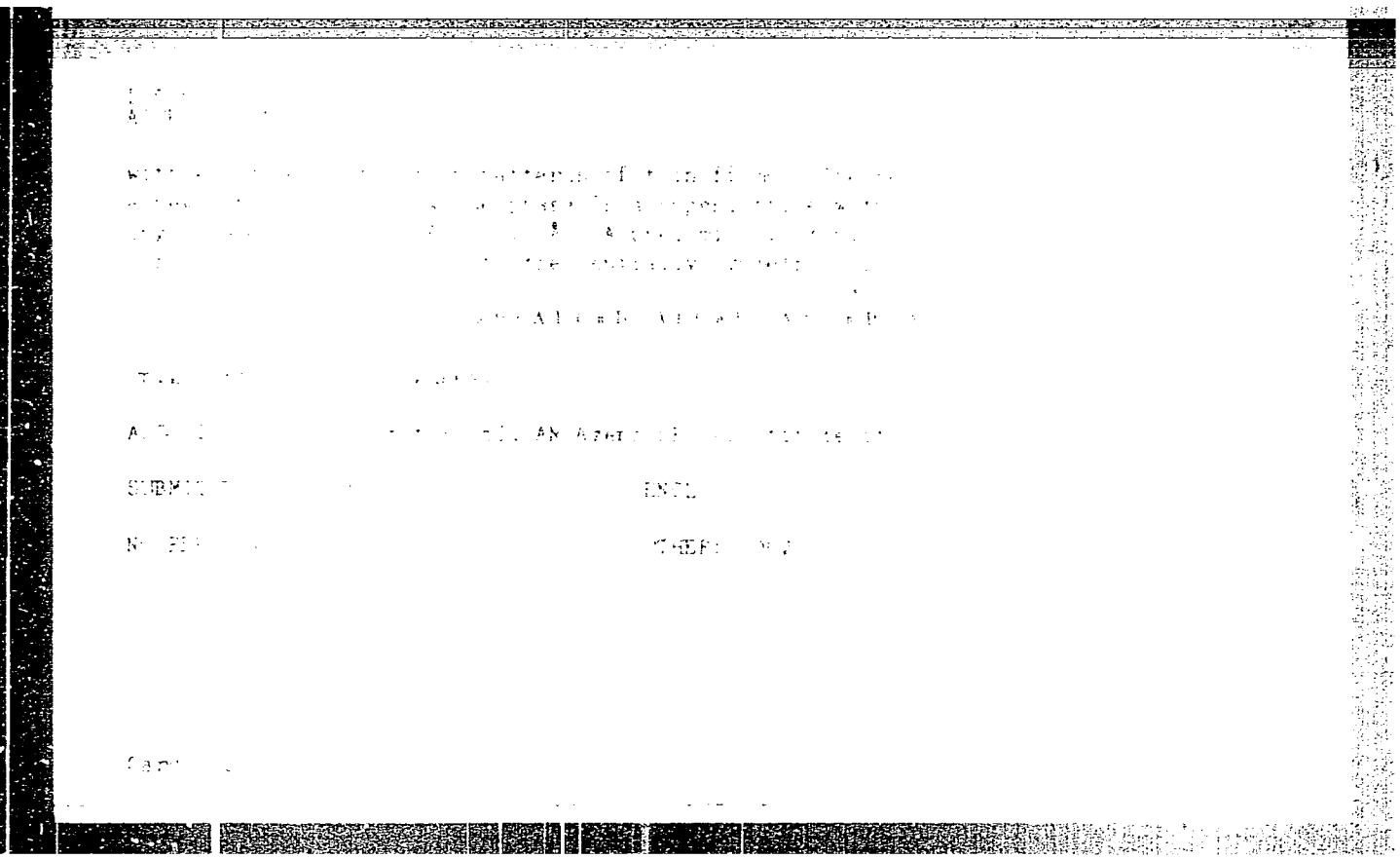
IANCEU, Aurel, ing.; CHIRA, Ioan, ing.

Technical and economic results obtained in the Cluj ion when applying bituminous ballast at high temperatures by using bituminous sands with and without petroleum hard bitumen. Rev transport 11 no.7:305-309 Jl '64.

RIPAN, Raluca, acad.; MARCU, Gheorghe; PASCU, Nicolae; CHIRA, Vasile

Determination of the speed of circulation by phases in auriferous pyrite flotation by radioactive gold 198. Studia Univ B-B S. Chem 7 no.1:61-69 '62.





5.3610

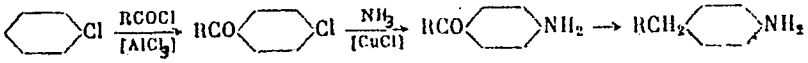
78304
SOV/79-30-3-58/69

AUTHORS: Nikolenko, L. N., Karpova, Ye. N., Khodak, V. A., Chirakadze, G. G., Borovik, V. P.

TITLE: Investigation of Aromatic Compounds With a Long Side Chain. III. Reduction of Alkyl 4-Aminophenyl Ketones According to Modified Kishner's Method

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 1028-1031 (USSR)

ABSTRACT: This is a continuation of the previous work (L. N. Nikolenko, K. K. Babiyevskiy, ZhOKh, 25, 2231, 1955) on preparation of aniline homologs according to the following scheme:



Card 1/6

Investigation of Aromatic Compounds With a Long Side Chain. III. Reduction of Alkyl 4-Aminophenyl Ketones According to Modified Kishner's Method

78304
SOV/79-30-3-58/69

A series of alkyl 4-chlorophenyl ketones (see Table 1) was obtained by the condensation of aliphatic acid chlorides with chlorobenzene in the presence of $AlCl_3$.

The reaction mixture was kept for 2 hr at 20-22° and 1 additional hr at 100°. The alkyl 4-aminophenyl ketones shown in Table 2 were obtained by ammonolysis of the corresponding alkyl 4-chlorophenyl ketones. 4-Alkylanilines shown in Table 3 were obtained by reduction of the corresponding alkyl 4-aminophenyl ketones with hydrazine hydrate according to the modified Kirshner method. There are 3 tables; and 9 references, 1 U.S., 3 U.K., 2 Japanese, 3 Soviet. The 4 U.S. and U.K. references are: E. Cline, E. Reid, J. Am. Chem. Soc., 49, 3152 (1927); G. Baddeley, J. Kenner, J. Chem. Soc., 303 (1935); W. J. Hickinbottom, A. C. Waine, J. Chem. Soc., 1558 (1930); W. J. Hickinbottom, J. Hickenbottom, J. Chem. Soc., 1119 (1937).

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Table 1. Alkyl 4-chlorophenyl ketones p-$RCOC_6H_4Cl$.
Key: (a) Yield (%); (b) mp; (c) mp of 2,4-dinitrophenylhydrazone.

R	a	b	c
C_4H_9	80	32—32.5	175—175.3°
C_6H_{13}	94	64.5—65.5	150—151
C_8H_{17}	97	58—58.5	134—135
$C_{10}H_{21}$	98	46.5—47	103.5—104.5
$C_{14}H_{29}$	81	51.5—52	80.3—80.7
$C_{15}H_{31}$	91	69.5—70	100—100.6

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Table 2. Alkyl 4-aminophenyl ketones p-$RCOC_6H_4NH_2$.
Key: (a) Yield (%); (b) mp.

R	a	b
C_6H_{13}	95	90—90.5
C_8H_{17}	98	91—92
$C_{10}H_{21}$	98	101.5—102
$C_{12}H_{25}$	98	107—104.5
$C_{14}H_{29}$	95	102—102.5
$C_{15}H_{31}$	99	99—100

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Table 3. 4-Alkylanilines p-$RC_6H_4NH_2$. Key: (a) Yield (%); (b) bp (pressure in mm) and mp.

R	a	b
C_9H_{13}	80	194—196 (16)
$C_{11}H_{23}$	85	167—168 (3)
$C_{14}H_{29}$	98	mp 19.5—20
		mp 44,5—45

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Investigation of Aromatic Compounds With a Long Side Chain. III. Reduction of Alkyl 4-Aminophenyl Ketones According to Modified Kishner's Method

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SUBMITTED: January 12, 1959

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AUTHORS: Nanobashvili, Ye. M., Beruchashvili, L. P., Gvilava, S. Ye., Ivanitskaya, L. V. and Chirakadze, G. G.

TITLE: Oxidation of sulphur compounds under the action of x and γ radiation

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 155-158

TEXT: The authors investigated the action of x and γ rays on the aqueous solutions of sulphides and thiocyanates of various alkali metals, aqueous suspensions of sulphide minerals and H_2S, mercaptans, thiourea and thiophen. Irradiation was carried out with x rays from a Co^{60} source with the activity of 35 curies, and also mixed radiation ИРТ-1000 (IRT-1000), the radiation dosage being 2.5×10^{14}, 5×10^{13} and 2.5×10^{15} ev/ml.sec respectively. The irradiation causes full oxidation of Na, K and NH_4 sulphides to

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the corresponding sulphates. Analogous behavior was shown by the alkali thiocyanates. Irradiation of the aqueous suspensions of pyrites, sphalerites and galenites gave considerable quantities of $SO_4^=$, Zn^{2+}, Pb^{2+} and Mo^{2+} which passed into solution. The irradiation of butyl-, amyl-, hexyl- and some other mercaptans, H_2S and thiophen, gave the corresponding disulphides and certain sulphocompounds. These processes progress intensively in aqueous emulsions, the aqueous phase of the irradiated emulsions containing large quantities of $SO_4^=$. It is concluded that the irradiation of the sulphides may find practical application for the production of sulphates from sulphide minerals and concentrates. There are 4 figures and 1 table.

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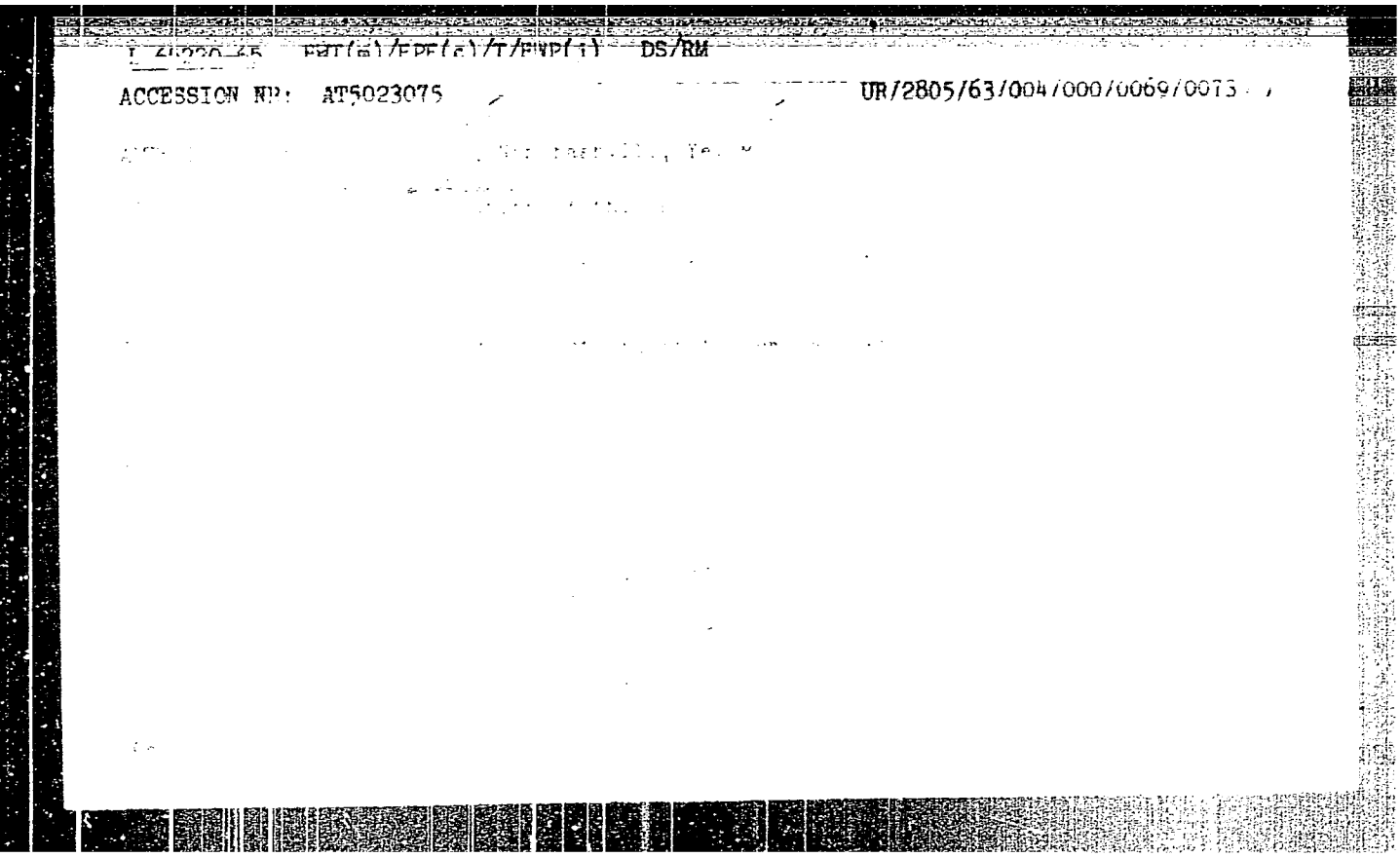

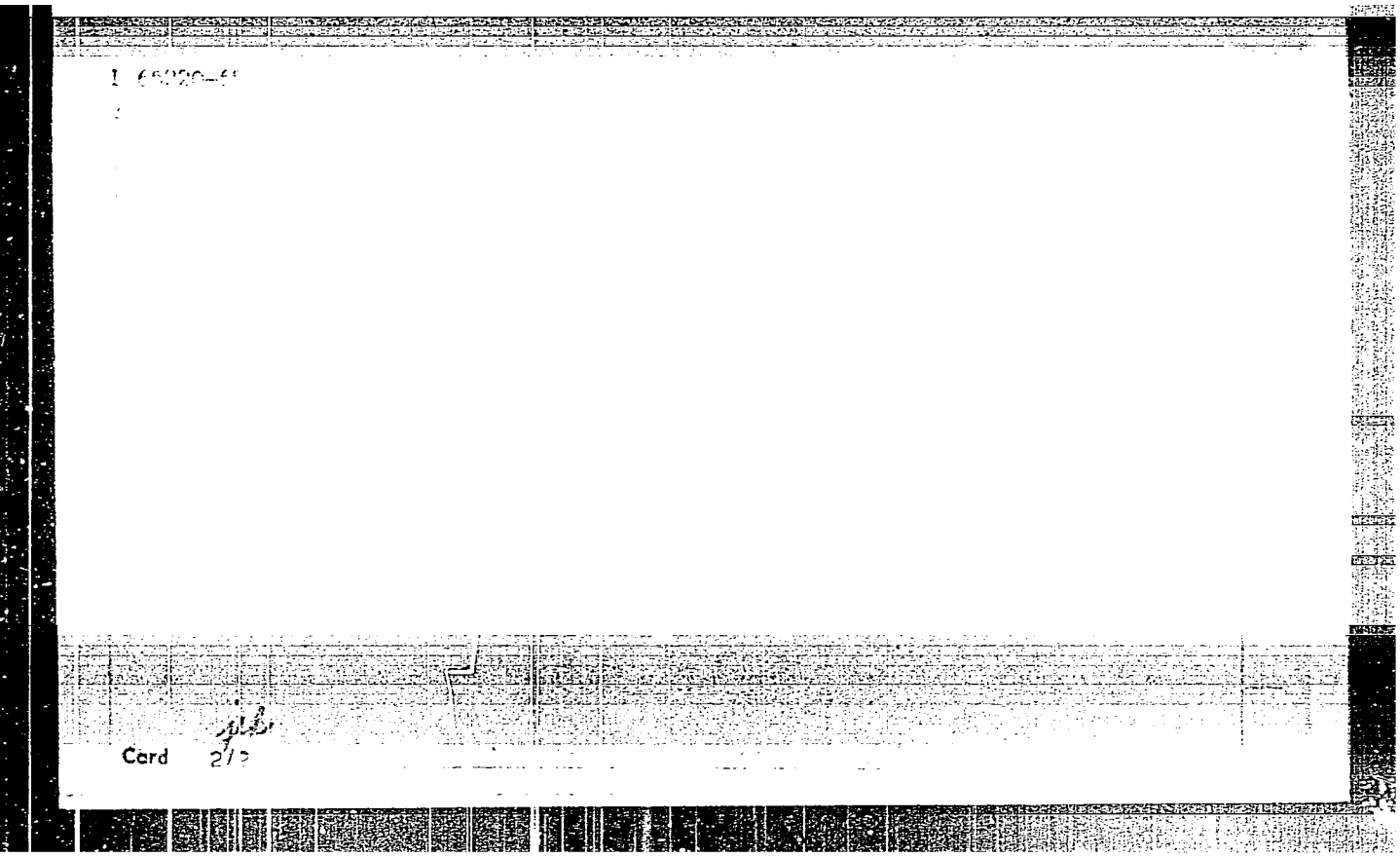

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Acad. of Sciences of the Gruzin SSR Physical Geography Series

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