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Adsorption from vapours and from ... S/065/62/000/008/001/003
E075/E135

the equilibrium concentration of n-hexane of about 0.2, this value being similar to that pertaining to the adsorption of n-hexane from vapour. The quantity of adsorbed molecules in one pore in the 5A sieve crystals is not great and is 2.6-2.7 for n-hexane. Molecular sieve 5A adsorbs Kr at -196 °C only on the external surface of the grains. Nitrogen at -196 °C penetrates markedly into the pores of the sieve 4A, but the speed of adsorption is very small and equilibrium is therefore not obtained. There are 4 figures and 1 table.

ASSOCIATION: Institut fizicheskoy khimii; MGU im. M.V.Lomonosova; GrozNII
(Institute of Physical Chemistry; MGU imeni M.V. Lomonosov; GrozNII)

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

KHRAPOVA, Ye. V.; ILELEV, A. V.; PETROVA, R. S.; SHCHERBAKOVA, K. D.; VASIL'YEVA, V. S.

"The physico-chemical characteristics of the adsorption process at phase boundaries through gas chromatography"
Report to be submitted for the Fourth International Symposium on Gas Chromatography, Hamburg, West Germany, 13-16 June 1962

Chemical Faculty, University of Moscow

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

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KI[illegible], [illegible]; [illegible], [illegible]; [illegible], [illegible].

[illegible] matographic characteristics [illegible]
[illegible] orient. Kin. i kat. [illegible]

1. Moskovskiy gosudarstvennyy [illegible] imeni Lomonosova [illegible]
micheskiy fakul'tet.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

VASIL'YEVA, V.S.; KISELEV, A.V.; NIKITIN, Yu.S.; PETROVA, R.S.; SHCHERBAKOVA, K.D.

Graphitized carbon black as an adsorbent in gas chromatography. Zhur.fiz.khim. 35 no.8:1889-1891 Ag '61. (MIRA 14:8)

1. Laboratoriya adsorbtsii i gazovoy khromatografii Khimicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

(Graphite)
(Gas chromatography)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

ARZHANYY, P.M.; VOLKOVA, R.M.; PROKOSHKIN, D.A.; Prinimali uchastiye: PETROVA, R.V.; IL'YASHEVA, N.A.

Investigating the diffusion of silicon and titanium in niobium. (MIRA 16:5)
Trudy Inst. met. no.11:78-82 '62.
(Niobium--Metallography) (Diffusion coatings)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

ARZHANYY, P. M. (Moskva); VOLKOVA, R. M. (Moskva); PROKOSHKIN, D. A. (Moskva); Prinimala uchastiye: PETROVA, R. V.

Thermal diffusion in the system tungsten-beryllium. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:162-166 N-D '62. (MIRA 16:1)

(Tungsten) (Diffusion coatings)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

TSUNTS, Mikhail Zinov'yevich; KARAULOV, N.A., doktor tekhnicheskikh nauk, redaktor; PETROVA, S., redaktor; TROYANOVSKAYA, N., tekhredaktor

[Great construction projects on the rivers of Siberia] Velikie stroiki na rekakh Sibiri. Moskva, Gos. izd-vo polit. lit-ry, 1956. 76 p. (MLRA 10:1)

(Siberia--Hydroelectric power stations)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

KOZLOV, Pavel Vasil'yevich; MEZENTSEV, Vladimir Andreyevich; PETROVA, S., red.; PASTUKHOVA, A., red.; TROYANOVSKAYA, N., tekhn.red.

[Wonderful story; the first step toward meeting the needs of the people] Chudesnaia byl'; novyi shag k udovletvoreniiu potrebnostei naroda. Moskva, Gos.izd-vo polit.lit-ry, 1958. 66 p. (MIRA 12:5)

(Synthetic products)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.

AGRICULTURE

Periodical KOOPERATIVNO ZEMEDELIE. No. 9, Sept. 1958.

PETROVA, S. Socialist obligations of the cooperative farms in Plovdiv District. p. 3.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

KAZANTSEV, Aleksandr Petrovich; PETROVA, S., red.; DANILINA, A., tekhn.red.

[The earth calls] Zemlia zovet. Moskva, Gos.izd-vo polit.lit-ry, 1957. 102 p. (MIRA 11:1)

(Agriculture)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.

PLONSKIY, Aleksandr Filippovich; SIFOROV, V.I., redaktor; PETROVA, S., redaktor; MUKHIN, Yu. tekhnicheskiy redaktor.

[Let us take a look into the future; present and future radioelectronics] Zaglianem v budushchee; radioelektronika segondia i zavtra. Pod obshchei red. V.I. Siforova. Moskva, Gos. izd-vo polit. lit-ry, 1957 69 p. (MLRA 10:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Siforov)
(Electronics)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.

PERVENTSEV, Arkadiy Alekseyevich; PETROVA, S., redaktor; DAKHLINA, A., tekhnicheskiy redaktor

[Creative work of millions] Tvorchestvo millionov. Moskva, Gos. izd-vo polit. lit-ry, 1957. 65 p. (MIRA 10:10)
(Labor and laboring classes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROV 1,5

GORELOV, Ivan Pavlovich; PETROVA, S., red.; TROYANOVSKAYA, N., tekhn.red.

[Everybody's concern] Vsenarodnoe delo. Moskva, Gos. izd-vo polit.lit-ry, 1957. 37 p. (MIRA 11:2)
(Collective farms)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

[illegible], S.

[illegible], S. [illegible] session of the [illegible] technical [illegible] organization for [illegible]

Vol. [illegible], No. [illegible], [illegible]
[illegible]
TECHNOLOGY
Sofiia, Bulgaria

[illegible] Acres [illegible]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.; VASILEV, A.

Third Plenum Meeting of the International Organization for Standardization, Committee on Technology [illegible]; [illegible] Pres. [illegible]
Rationalizatsii Vol. [illegible], No. [illegible], Apr. [illegible]. Sofia, Bulgaria.

Monthly Index of East European Accessions [illegible] Vol. [illegible], No. [illegible], Oct. [illegible]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

GORELIK, I.G., redaktor; PETROVA, S., redaktor; TROYANOVSKAYA, N., tekhnicheskiy redaktor.

[In the name of Communism; sketches about the creative work of laborers in heavy industry] Vo imia kommunizma; ocherki o tvorcheskom trude rabotnikov tiazhelei promyshlennosti. Moskva, Gos. izd-vo polit. lit-ry, 1955. 294 p. (MLRA 9:5)
(Russia--Industries)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

[illegible]A, S.

"Phytin, a New Article in the Medical Industry", [illegible], (FARMATSIYA, Vol. 4, No. 1, Jan. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. [illegible], No. 1, Jan. 1955, Incl.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, St., inzh. khim.

The standard methods for the analysis of nonferrous metals and some of their alloys. Ratsionalizatsiia no.10:31-33 '62.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

YELISEYEVA, V.I.; PETROVA, S.A.

Improving the quality and widening the assortment of acrylic emulsions. Kozh.-obuv.prom. 4 no.2:32-34 F '62. (MIRA 15:2)
(Leather) (Finishes and finishing)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S. A.

"Research on the Regeneration of Kidney Tissue in White Mice," Dok.A., 88, No.5, [illegible]. Mar., [illegible] State Med. Inst., Min. of Health [illegible], -c[illegible]-.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

Cand. Med. Sci.

PETROVA, S. A.

Dissertation: "Investigation on Regeneration of the Kidney Tissue of White Rats."

20/3/50
Moscow Medical Inst. Ministry of Health of RSFSR

SO Vecherniaia Moskva
Sum 71

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

1. PETROVA, S. A.

2. USSR (600)

4. Kidneys

7. Elimination function of the renal epithelium. Arkh anat gist i embr. No. 6 1952

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

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 8958-66 EWT(m)/EWP(j)/T RM

ACC NR: AP5026529 SOURCE CODE: UR/0286/65/000/019/0070/0070

AUTHORS: Yeliseyeva, V. I.; Il'ichev, G. I.; Karpeyev, Ye. F.; Metelkin, A. I.; Zharkov, M. N.; Petrova, S. A.; Ionova, N. I.; Gorina, F. A.; Khandozhko, Ye. N.; Zurabyan, K. M.; Loseva, V. A.; Morgulis, I. A.; Arkhangel'skaya, A. P.; Kryuchkova, M. P.

ORG: none

TITLE: Method for obtaining film-forming materials and impregnating materials for trimming and filling of natural and artificial leather. Class 39, No. 175227

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 70

TOPIC TAGS: leather, polymer, protein, vinyl plastic, acrylic plastic

ABSTRACT: This Author Certificate presents a method for obtaining film-forming and impregnating materials for trimming and filling of natural and artificial leather by modification of vinyl, for instance, acrylic and methacrylic monomers by means of proteins. To increase the thermal, acetone, and water stability of coatings and the durability and filling of the material structure, the starting monomers are emulsified in an aqueous protein solution. The emulsification is followed by

UDC: 678.744.32-416
677.862.524.1

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 8958-66

ACC NR: AP5026529

polymerization in the presence of oxidation-reduction initiating systems.

SUB CODE: 07/ SUBM DATE: 09Feb62

BVK

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

NIKOLAYEV, N.S. [translator]; PETROVA, S.B. [translator].

Germanium and its compounds. O. Johnson (Translated from Chemical Reviews, 1952, 51:431-469 by N.S.Nikolaev, S.B.Petrova. Usp.khim.25 no.1:105-132 Ja '56. (Germanium) (MIRA 9:4)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

TARASOVA, Z.N., DOGADKIN, B.A., ARKHANGEL'SKAYA, M.I., PETROVA, S.B.

Structure and properties of vulcanizates produced from carboxylated polymers obtained through the combined action of metal oxides and high energy radiation. Koll. zhur. 22 no.2:253-256 Mr-Ap '60. (MIRA 13:8)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva.
(Rubber—Research) (Radiation)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

S/844/62/000/000/097/129
D234/D307

AUTHORS: Tarasova, Z. N., Dzantiyev, B. G., Yegorov, Yu. V., Kapranov, N. Ya., Petrova, S. B., Sobolev, V. S. and Dogadkin, B. A.

TITLE: Investigation of rubber structurization under the action of accelerated electrons

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 569-575

TEXT: Natural butadiene-styrene and carboxylate rubbers were investigated. The energy of the electrons was 0.6, 1.0 and 2 Mev. The specimens were 0.02 - 0.3 mm thick films, 60 x 60 x 1 mm plates and 10 mm thick washers. Irradiation in free state in air from an accelerator (0.2 - 0.8 megarad/sec) showed less destruction than that from a Co^{60} source in inert atmosphere. In natural rubber, destruction is much greater in the first case. In filled natural rubber it is less in the first case, in pre-vulcanized mixtures of

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Investigation of rubber ... S/044/62/000/00[illegible]/0[illegible]7/1[illegible]
D234/D307

carboxylate rubber it is equal in both cases. Thermomechanical stability of electron-irradiated vulcanized rubbers was about 4 times as high as that of Co^{60} irradiated rubbers. Those of carboxyl containing rubbers show high strength and wear resistance (abrasion index - 115 cm^3/kWh for nonfilled rubbers irradiated with 24 megarad and 200 cm^3/kWh for nonfilled sulphur rubbers). Chemical relaxation curve of these rubbers shows destruction and re-grouping of salt bonds in its initial part. There are 5 figures and [illegible] tables.

ASSOCIATION: NII shinnoy promyshlennosti (NII of the Tire Industry); Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AS USSR)

Card 2/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

69465

S/069/60/022/02/021/024
D034/D002

15.9120

AUTHOR: Tarasova, Z.N., Dogadkin, B.A., Arkhangel'skaya, M.I. Petrova S.B.

TITLE: The Structure and Properties of Vulcanizates of Carboxylated Rubber Produced by the Combined Action of Metal Oxides and High Energy Radiation

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol XXII, Nr 2, pp 253-256 (USSR)

ABSTRACT: On the basis of a number of investigations the authors of the article discuss the effect of the structure of vulcanizates of carboxylated rubber on their strength properties. It could be established that the rate constant of stress relaxation of these vulcanizates at 150°C is about 50-100 fold that of the vulcanizates with polysulfide bonds [Ref. 1]. Investigation of the change of osmotic and viscosi-

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69468

S/069/60/022/02/021/024
D034/D002

The Structure and Properties of Vulcanizates of Carboxylated Rubber Produced by the Combined Action of Metal Oxides and High Energy Radiation

metric properties of rubber mixture and vulcanizate solutions prior to and after relaxation showed that the molecular weight does not considerably change. This in connection with the observed preservation of the number of cross links during relaxation suggests the conclusion that the weakening of the stress during the relaxation of carboxylated rubber vulcanizates with salt type cross bonds is due to the disintegration of the latter and the rising of new bonds as a result of exchange reactions. The low thermal stability of salt type bonds requires additional introduction of stable bonds into the vulcanization network. Good results were obtained with Co^{-60} treatment of carboxylated rubber preliminarily vulcanized

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69468
S/069/60/022/02/021/024
D034/D002

The Structure and Properties of Vulcanizates of Carboxylated Rubber Produced by the Combined Action of Metal Oxides and High Energy Radiation

with metal oxides. The formation of a limited number of cross bonds-C-C- (approximately 1 per 1000 monomer units) permits preparing vulcanizates of high thermal stability and strength. The strength of such vulcanizates exceeds 400 kg/cm^2. There are 1 graph, 1 table and 4 references, 3 of which are Soviet and 1 English.

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

SUBMITTED: November 9, 1959

Card 3/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.G. (Leningrad)

Use of the method of least squares in solving a mixed problem in the theory of elasticity. Izv. vys. ucheb. zav.; mat. no. 5:97-100 '63. (MIRA 16:11)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.G. (Leningrad)

Boundedness of the inverse operator in a mixed problem in the theory of elasticity. Izv. vys. ucheb. zav.; mat. no.3:109-121 '63. (MIRA 16:4)

(Operators(Mathematics)) (Elasticity)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

20 (-10/64

AUTHOR PETROVA, S.G.,

TITLE On the First Boundary-Value Problem of the Nonlinear Theory of Elasticity.

PERIODICAL (O pervoy krayevoy zadache nelineynoy teorii uprugosti - Russian) Doklady Akademii Nauk, 1957, Vol 114, Nr 1, pp 41-44, (U.S.S.R.)

ABSTRACT The paper under review deals with the theorems of existence and of ambiguousness for the nonlinear problem of the theory of elasticity, if on the boundary of the body the vector of displacement is given. The author of the paper under review investigates the tridimensional problem of the nonlinear theory of elasticity for the space pair (W_2^4, W_2^2) - with W_1^k denoting the space of those functions which has with the power 1 summable k-th generalized derivations-, and the plane problem of the nonlinear theory of elasticity for the space pair $(E_{\lambda,2}, E_{\lambda})$ - with $E_{\alpha,k}$ denoting a space of functions, the k-th derivations of which satisfy the Lippschitz condition with the exponent α. Furthermore, a norm is introduced in the space W_2^4. Let P denote the operator of the nonlinear theory of elasticity, and let furthermore $P\vec{u} = (P_x\vec{u}, P_y\vec{u}, P_z\vec{u})$. Then we have $P\vec{u}$ = div $T+K$, $T = \Psi(\Gamma^2)\, E+(k-(1/3)\Psi(\Gamma^2))\, I$. In this context, $T=(\tau_{ik})$ denotes the stress tensor, $E=(\varepsilon_{ik})$ stands for the tensor of deformation, I denotes the unit tensor, $\vec{K}(X,Y,Z)$ the vector of the volume forces, $\vec{u}$ the vector of the displacements, $\Psi(\Gamma^2)$ the so-called function of plasticity, Γ the intensity

Card 1/2

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[illegible], [illegible]: [illegible]

[illegible] of [illegible] with strengthened [illegible].

Leningrad, [illegible] (Leningrad Order of Lenin State [illegible]),

150 copies (KL, [illegible], [illegible], [illegible])

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

16(1) SOV/43-59-1-7/17

AUTHOR: Petrova, I.G.

TITLE: On the Boundary Value Problems of Non-Linear Elasticity Theory (O krayevykh zadachakh nelineynoy teorii uprugosti)

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1959, Nr 1(1), pp 57-78 (USSR)

ABSTRACT: The author considers the problem (A) :

$$\frac{\partial \sigma_x}{\partial x} + \frac{\partial \tau_{xy}}{\partial y} + \frac{\partial \tau_{xz}}{\partial z} + X = 0$$

etc. cyclic , $\bar{u}|_S = 0$

under the assumption

$$T = \psi(\Gamma^2)E + (k - \frac{1}{3}\psi(\Gamma^2))\varepsilon I ,$$

where $T = (\tau_{ik})$ is the stress tensor, $E = (\varepsilon_{ik})$ the deformation tensor, ε the linear invariant of E, $k = \lambda + \frac{2}{3}\mu$, λ, μ Lamé constants, ψ the plasticity function ,

Card 1/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

On the Boundary Value Problems of Non-Linear Elasticity Theory

$$\Gamma^2 = \frac{2}{3}\left[(\varepsilon_x-\varepsilon_y)^2 + (\varepsilon_x-\varepsilon_z)^2 + (\varepsilon_y-\varepsilon_z)^2 + \frac{3}{2}(\gamma_{xy}^2 + \gamma_{xz}^2 + \gamma_{yz}^2)\right],$$

$$0 \leq \psi(\Gamma^2) \leq 2\mu, \quad \lim_{\Gamma^2\to 0} \psi(\Gamma^2) = 2\mu, \quad \lim_{\Gamma^2\to 0} \psi'(\Gamma^2) = 0.$$

Furthermore let the boundary S be 7-times continuously differentiable, the vector of the volume forces is assumed to belong to W_2^1, the solution is sought in W_2^3, where W_k^l is the space of those functions, the l-th generalized derivatives of which are summable in the k-th power.

Theorem: For $\varkappa \leq \frac{1}{2B_0^2 N\eta_0}$ it exists a unique solution of (A) in W_2^3, where it is $\|\bar{u}\|_{W_2^3} \leq \frac{1-\sqrt{1-2h}}{h} B_0 \eta_0$. For

Card 2/4

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On the Boundary Value Problems of Non-Linear Elasticity Theory

$\varkappa < \frac{1}{2B_o^2 N \nu_o}$ the modified Newton approximation method converges with the velocity: $\|\bar{u}_n - \bar{u}\|_{W_3^2} \leq q^{n-1} \|\bar{u}_1 - \bar{u}\|_{W_3^2}$, $q = 1 - \sqrt{1-2h}$. Here it is $\nu_o = \|\bar{K}\|_{W_2^1}$, where $\bar{K}$ is the vector of the volume forces (X,Y,Z), $h = B_o^2 N \nu_o \varkappa$; B_o = const, u_n the n-th approximation; $\varkappa$ is defined by $\psi(\Gamma^2) = 2\mu(1-\varkappa\omega(\Gamma^2))$. An analogous result holds in the plane case, if $\bar{K} = \{X,Y\} \in E_\alpha$ and u is sought in $E_{\alpha,2}$ ($E_{\alpha,2}$ the space of functions the second derivatives of which satisfy the Hölder condition with the exponent α).

Altogether there are six lemmata and three theorems. The author uses results of V.M. Babich, S.L. Sobolev, L.V. Kantorovich.

Card 3/4

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SOV/43-59-1-7/17

On the Boundary Value Problems of Non-Linear Elasticity Theory

There are 8 references, 7 of which are Soviet, and 1 German.

SUBMITTED: April 10, 1957

Card 4/4

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.I.

Respiration of carp in ontogenesis. Trudy sov.Ikht.kom. no.8:332-338 '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva.
(Carp) (Respiration)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.M., kand. sel'khoz. nauk; SOVETKINA, V.Ye., kand. sel'khoz. nauk; GAVRILOV, I.S., red.; PRESNOVA, V.A., [illegible] red.

[Concise manual for the foreman in vegetable-growing] Kratkii spravochnik brigadira-ovoshchevoda. Leningrad, Lenizdat, 1961. 178 p. (MIRA 15:3)

(Vegetable gardening)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.N.

Activity of the scientific and technical section for the reliability and durability of motor vehicles. Avt. prom. 30 no.6:38 Je '64. (MIRA 17:12)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SADOVSKIY, V.D.; SOKOLKOV, Ye.N.; PETROVA, S.N.; PAVLOV, V.A.; GAYDYKOV, M.G.; NOSKOVA, N.I.; KAGAN, D.Ya.

Effect of high temperature thermomechanical working on the heat-resistant properties of the KhN77TIUR alloy. Fiz. met. i metalloved. 17 no.6:845-852 Je '64. (MIRA 17:8)

1. Institut fiziki metallov AN SSSR.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

S/137/60/000/009/[illegible]
A006/A001

Translation from Referativnyy zhurnal, Metallurgiya, 1960, No. 9, p. 2[illegible], # 21524

AUTHORS. Sokolov, Ye.N., Sadovskiy, V.D., Petrova, S.N.

TITLE Structure of Austenitic Grain Boundaries and Temper Brittleness of Structural Steels

PERIODICAL. V sb.: Nekotoryye probl. prochnosti tverdogo tela. Moscow-Leningrad, AN SSSR, 1959, pp. 165-171

TEXT The authors investigated the mechanism of the effect of heat and mechanical treatment on the weakening of temper brittleness of structural alloyed steels. It is established that the weakening of the temper brittleness of structural alloyed steels during the thermomechanical treatment is connected with higher values of brittle strength. Plastic deformation in austenitic state under conditions preventing the development of recrystallization of hardfaced austenite

Card 1/2

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Structure of Austenitic Grain Boundaries [illegible]

causes distortions of the austenitic grain boundaries. The [illegible]
a treatment with quenching [illegible]
temper brittleness. There are [illegible]

K.M.

Translation note: This is the full translation [illegible]

Card 2/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

3

34134
S/659/61/007/000/021/044
D217/D303

18.1151

AUTHORS: Sadovskiy, V.D., Sokolkov, Ye.N., Lozinskiy, M.G., Petrova, S.N., Antipova, Ye.I., Gaydukov, M.G., and Mirmel'shteyn, V.A.

TITLE: Influence of thermo-mechanical treatment on the high temperature strength properties of austenitic steel

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 7, 1961, 202-204

TEXT: A complex alloy steel of the austenitic class, widely used in industry for manufacturing components for high temperature service, was studied. During ageing of this steel, the complex chromium and vanadium carbides responsible for its strengthening are precipitated. The material was heated to 1180 - 1200°C and rolled at 1000 - 1100°C at a speed of 5.7 m/min. After rolling, the billets were immediately water quenched in order to prevent recrystallization. The cross-section of the billets obtained was 11.5 x 11.5 mm, their length, 70 mm, and the reduction due to rolling, [illegible]

Card 1/4

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S/659/61/[illegible]
D217/D303

Influence of thermo-mechanical ...

Control billets were heated simultaneously with those chosen for thermo-mechanical treatment, and were subsequently quenched from the above temperature. All billets, whether thermo-mechanically treated or only heated and quenched, were aged to a hardness of 320 HB. After heat treatment, specimens for two series of tests were made from the billets. One series was used for studying structure during high temperature extension in vacuo. This also enabled the degree of deformation to be determined and photographs of the same portion to be taken at various stages of testing. Testing was carried out in a IMASh-5M machine at 900°C and a stress of 9.5 kg/mm², using specimens of 3 x 3 mm cross-section, heated by direct passage of current. The second series of tests, in which K. I. Tarakhov participated, consisted of the standard tests for long-term strength at 650°C and stresses of 35 and 38 kg/mm², as well as at 700°C and a stress of 32 kg/mm². For this purpose, specimens of working portion diameter of 5 mm and 50 mm length were used. The microstructure of each specimen was studied in conjunction with these tests, particularly any peculiarities in structure appearing after thermo-mechanical treatment as compared with normal heat treatment.

Card 2/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

S/659/61/007/000/021/044
D217/D303

Influence of thermo-mechanical ...

The distribution of deformation along the length of the specimen, the intercrystalline and crystalline plasticity and the formation and propagation of cracks during fracture were given particular attention. It was found that high-temperature plastic deformation of the steel investigated, under conditions in which recrystallization processes are suppressed (thermo-mechanical treatment), leads to a considerable increase in long-term strength. The beneficial action of thermo-mechanical treatment is associated with structural characteristics of the steel which arise during high temperature plastic deformation and are fixed by cooling at a sufficiently high rate. Such characteristics are the complex geometry of grain boundaries, grain fragmentation and further refinement of the fine crystal structure. These structural characteristics of the steel retarded the development of fracture during creep, since (a) the characteristic serrated grain boundary structure retards the amalgamation between micro- and macro-cracks; (b) breaking-up of the fine crystal structure, and an increase in the density of immobilized dislocations render plastic deformation within the grains more difficult. There are 5 figures and 16 references: 15 Soviet-bloc and

Card 3/4

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S/659/61/007/000/31/044
D217/D303

Influence of thermo-mechanical ...

non-Soviet bloc. The reference to the English language publication reads as follows: P.W. Davies and J. P. Dennison, J. Inst. Metals 87, 4, 1958.

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Card 4/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

S/126/62/013/003/007/023
E193/E383

18.1910

AUTHORS: Petrova, S.N., Gaydukov, M.G. and Smirnov, L.V.

TITLE: The effect of thermomechanical treatment on creep-resistance of nickel

PERIODICAL: Fizika metallov i metallovedeniye, v. 13, no. 3, 1962, 380 - 386

TEXT: Thermomechanical treatment (TMO) constitutes a new method of improving the strength of steels and other alloys by means of hot plastic deformation, followed immediately by quenching. The treatment has been extensively studied both in the Soviet Union and abroad but the interpretation of the results has been somewhat difficult owing to the fact that the changes observed could be attributed both to TMO and to the effect of solid-state transformations taking place in the alloys studied - hence the present investigation carried out on technically pure nickel. Square cross-section test pieces (11.5 x 11.5 x 70 mm) were heated to 1 100 °C, cooled in the furnace to 800 °C, hot-rolled at this temperature to 25% reduction at a rolling speed of 11 m/min and then immediately quenched in water. Another series

Card 1/3

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of test pieces was subject to the same heating/cooling cycle without, however, plastic deformation at 800 °C. Creep tests were carried out at 500 °C on test pieces of each series. The results are reproduced in Fig. 3, where the stress (σ, kg/mm^2) is plotted against time-to-rupture (τ_p, hrs), the continuous and broken curves relating, respectively, to material subjected to TMO and to the pilot test pieces. The rate of steady creep amounting to 1.1×10^{-1} %/hr for the pilot test pieces was 3.5×10^{-4} %/hr for material subjected to TMO. Since it could be postulated that the higher creep resi tance of specimens subjected to TMO was due to their higher hardness (100 BHN as compared with 60 BHN of nickel quenched from 800 °C), a supplementary series of tests was carried out on specimens given the following treatment: heating to 1 100 °C; quenching; 25% reduction by rolling at 300 °C and 12 hours annealing at 500 °C. The results are reproduced in a table. It will be

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E193/E383

The effect of ....

seen that also in this case the material subjected to TMO exhibited better creep properties. These results, combined with the results of metallographic examination, led the present authors to the conclusion that the improvement brought about by TMO was associated with the high stability of lattice distortions caused by this treatment, both in the interior of the grains and particularly, in the grain-boundary regions. In addition, the grain boundaries themselves become distorted in such a way that they inhibit the propagation of cracks under conditions of intercrystalline fracture, thus increasing considerably the time-to-rupture under a given stress. There are 7 figures and 1 table.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physics of Metals of the AS USSR)

SUBMITTED: November 17, 1961

Card 3/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

BOGACHEV, I.N.; MI[illegible]S, [illegible].I.; Prinimala uchastiye PETROVA, S.N.

Effect of treatment in fused media on the plasticity [illegible] transformer steel. Izv. vys. [illegible] heb. zav.; chern. met. 6 no.9:174-176 '63. (MIRA 16:11)

1. Ural'skiy poli[illegible] [illegible]itut.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 26633-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b) Pf-4 JD/HW
ACCESSION NR: AP5004271 S/0126/65/019/001/0101/0104

AUTHOR: Sokolov, Ye. N.; Gaydukov, M. G.; Petrova, S. N.

TITLE: Specific features of the first stage creep in nimonic-type alloy subjected to high-temperature thermomechanical treatment

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 1, 1965, 101-104

TOPIC TAGS: nimonic alloy, nimonic alloy creep, alloy thermomechanical treatment

ABSTRACT: The effect of high-temperature thermomechanical treatment (HTTMT) on the creep behavior of nimonic-type alloy has been investigated. Alloy specimens were rolled at 1080C with 25—30% reduction, water quenched, and aged at 750C for 16 hr. Creep tests at 500, 550, and 600C under a stress of 70—105 kg/mm^2 showed that the HTTMT considerably affects the alloy creep behavior: it decreases the initial deformation, prolongs the first creep stage, and reduces the creep rate and the total deformation of the first stage (see Fig. 1 of the Enclosure). Such behavior is explained by the decrease in the number of moving dislocations and the formation of a stable substructure. It is assumed that HTTMT has a more pronounced blocking effect on dislocations than the substructure formed in the first creep

Card 1/3

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L 26633-65

ACCESSION NR: AP5004271

stage. This may be associated with a localization of the decomposition of solid solution around the dislocations, and also with the formation of dissolved atom clouds around the dislocations. Orig. art. has: 3 figures. [ND]

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physics of Metals, AN SSSR)

SUBMITTED: 27Jan64 ENCL: 01 SUB CODE: MM

NO REF SOV: 012 OTHER: 008 ATD PRESS: 3188

Card 2/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 26633-65
ACCESSION NR: AP5004271

ENCLOSURE: 01

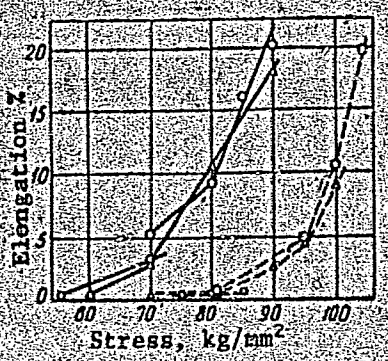

Fig. 1. Creep curves of nimonic-type alloy

—— HTTMT; --- regulat treatment;
o - 500; Δ - 550; □ - 600C

Card 3/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 17699-65 EWT(m)/EWP(w)/EWA(d)/EWP(k)/EWP(t)/EWP(b) Pf-4/Pad MJW/JD/HW

ACCESSION NR: AP4042041 S/0126/64/017/006/0845/0852

AUTHOR: Sadovskiy, V. D.; Sokolkov, Ya. N.; Petrova, S. N.; Pavlov, V. A.; Gaydukov, M. G.; Noskova, N. I.; Kagan, D. Ya.

TITLE: The effects of high-temperature thermo-mechanical treatment on the heat resistance of KhN77TYuR alloy

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 6, 1964, 845-852

TOPIC TAGS: nickel alloy, chromium containing alloy, aluminum containing alloy, creep rate, recrystallization, boron containing alloy, KhN77TYuR alloy, thermo mechanical treatment, heat resistance

ABSTRACT: The method of hot plastic deformation combined with quenching was used to enhance the stress-rupture strength of austenitic steels. The authors investigate the possibility of applying this combined method to KhN77TYuR, a nimonic-type alloy. Specimens 11.5 x 11.5 x 70 mm were annealed at 1080C for 8 hr. and rolled with a reduction of 25% at a rolling speed of 1.5 m/min. The process

Card 1/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 17699-65

ACCESSION NR: AP4042041

of recrystallization was suppressed by water cooling the specimens immediately after plastic deformation. All specimens were aged at 750C for 16 hr. Hardness was 285 HB. At 550C and under a stress of 90 kg/mm^2, the rupture life was extended from 4 to 100 hr while the creep rate decreased from 4-8 x 10^{-2}% to 9 x 10^{-1}% per hr. Above the 500—600C range a deterioration of strength characteristics was observed. The authors attribute the adverse effect of the combined method at 750C to the recrystallization during testing and to a possible higher rate of coagulation of the strengthening phase. The decrease in the creep rate and the increase of the rupture life were verified by x-ray method. The authors point out the formation of a polygonized substructure and to a boundary distortion in the form of characteristic serration during high-temperature deformation. They contend that the substructural boundaries impeded the travel of dislocations during creep, while the distortion of the grain boundaries lowered the susceptibility to intercrystalline failure. The authors suggest that the method of investigation may be insufficiently developed for an exhaustive interpretation of the results obtained and of the peculiarities of the structural state of the material. Orig. art. has: 5 figures.

Card 2/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

L 17699-65

ACCESSION NR: AP4042041

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of the Physics of Metals AN SSSR)

SUBMITTED: 12Jul63 ENCL: 00 SUB CODE: MM

NO REF SOV: 012 OTHER: 008

Card 3/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

S/123/62/000/015/002/013
A052/A101

AUTHORS: Sadovskiy, V. D., Sokolkov, Ye. N., Lozinskiy, M. G., Petrova, S. N., Antipova, Ye. I., Gaydukov, M. G., Mirmel'shteyn, V. A.

TITLE: The effect of thermomechanical treatment on refractory properties of austenitic steel

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 15, 1962, 21, abstract 15A115 (In collection: "Issled. po znaroprochn. splavam". T. 7, Moscow, AN SSSR, 1961, 202 - 209)

TEXT: The effect of thermomechanical treatment on the change of structure of austenitic alloyed steel in the process of high-temperature stretching in a vacuum (at 900°C and 950 kg/mm^2 stress) and on the rupture strength at 650°C (σ = 35 and 38 kg/mm^2) was studied. The thermomechanical treatment consisted of rolling with 25 - 30% reduction in area and 5.7 m/min. speed at 1,000 - 1,100°C and a subsequent water hardening. It is pointed out that thermomechanical treatment increases the rupture strength and inhibits the process of creep rupture; this is explained by the characteristics of the structure forming at a high-tem-

Card 1/2

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A052/A101

The effect of thermomechanical...

perature plastic deformation. There are 16 references.

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

Akademiya nauk SSSR

Nekotoryye problemy prochnosti tverdogo tela; sb rnik statey (Some Problems in the Strength of Solids; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 386 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V. I. Aver'yanov; Tech. Ed.: N. S. Pevzner;
Editorial Board: A.F. Ioffe, Academician; G. V. Kurdyumov, Academician; S. N. Zhurkov, Corresponding Member, USSR Academy of Sciences; B. P. Konstantinov, Corresponding Member, USSR Academy of Sciences; F. F. Vitman, Doctor of Physical and Mathematical Sciences, Professor (Resp. Ed.); L. A. Glikman, Doctor of Technical Sciences, Professor; N. A. Zlatin, Doctor of Physical and Mathematical Sciences; V. A. Stepanov, Doctor of Technical Sciences; Ya.B. Fridman, Doctor of Technical Sciences, Professor; B. S. Ioffe, Candidate of Technical Sciences (Deputy Resp. Ed.).

PURPOSE: This book is intended for construction engineers, technologists, physicists and other persons interested in the strength of materials.

COVERAGE: This collection of articles was compiled by the Otdeleniye fiziko-matematicheskikh nauk AN SSSR (Department of Physical and Mathematical Sciences) and the Fiziko-tekhnicheskiy institut AN SSSR (Institute of Applied Physics, Academy of Sciences, USSR) in commemoration of the 80th birthday of Nikolay Nikolayevich Davidenkov, Member of the Ukranian Academy of Sciences, founder and head of the Otdel prochnosti materialov (Department of the Strength of Materials) at the Institute of Applied Physics, Academy of Sciences, USSR, founder of the Fakul'tet fizicheskogo metallovedeniya (Department of Physical Metallurgy) at the Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute), recipient of the Stalin Prize (1943), the Order of the Red Banner of Labor (1945) and the Order of Lenin (1953). The articles deal with the strength of materials, phenomena of imperfect elasticity, temper brittleness, hydrogen embrittlement, cold brittleness, influence of deformation speed on the mechanical properties of materials, fatigue of metals, and general problems of the strength, plasticity, and mechanical properties of nonmetals. Numerous personalities are mentioned in the introductory profile of Professor Davidenkov. References are given at the end of each article.

Moroz, L.S., and Yu.D. Khesin. Investigation of the Hydrogen Embrittlement of Two-Phase Titanium Alloys 140

Polak, Ya.M., and O.F. Breslavtseva. Hydrogen Embrittlement of Steel and the Influence of Mechanical Testing Conditions on Its Occurrence 152

Sokolkov, Ye.N., V.D. Sadovskiy, and S.N. Petrova (Institute for Metal Physics, Ural Branch, Academy of Sciences, USSR, Sverdlovsk) Structure of Austenite Grain Boundaries and the Temper Brittleness of Structural Steel 164

Agayev, E.V., and V.A. Trapeznikov (Institut metallurgii AN SSSR, g. Moskva - Metallurgical Institute, Academy of Sciences, USSR, Moscow). Influence of the Degree of Purity on Cold Brittleness and Other Properties of Chromium 172

Markov, V.G., P.O. Pashkov, and Ye.D. Teplova. Cold Hardening of Pearlitic Steel With an External Layer of Austenitic Steel Alloy 179

Bakharov, P.S. (Industrial'nyy institut imeni Kuybysheva, g. Kuybyshev - Industrial Institute imeni Kuybyshev, Kuybyshev). Effect of the Cooling Rate and Some Other Factors on Rupture Strength of Chromium-Aluminum Steel 187

Shevandin, Ye.M. (deceased), I.A. Razov, and A.V. Tefimov. Influence of the Scale Factor During Plastic Deformation and Rupture of Steels of Varying Strength 198

Vitman, F.F., and V.A. Stepanov (Institute of Applied Physics, Academy of Sciences, USSR, Leningrad). Influence of Deformation Rate on the Deformation Resistance of Metals at Impact Speeds of 10^{2} - 10^{3} m/sec 207

Zlatin, N.A. (Institute of Applied Physics, Academy of Sciences, USSR, Leningrad) Role of Compressibility in the Dynamic Deformation of Plastic Bodies 222

Konstantinov, V.N., and Ye.I. Timofeyev. Influence of a High Deformation Rate on the Mechanical Properties of Steel Alloy Type V-95 After Varying Degrees of Aging 230

Uzhik, G.V., and Yu.Ya. Voloshenok-Klimovitskiy (Institute of Mechanical Engineering, Academy of Sciences, USSR, Moscow) Resistance to Initial Plastic Deformation During Impact Stress Under Low-temperature Conditions 238

Glikman, L.A., and V.F. Tekht. Physical Nature of Metal Fatigue. 246

Kudryavtsev, I.V., and N.M. Shvvina (TsNIITMASH - Central Scientific Research Institute of Technology and Machinery). Fatigue Strength of Large Plates 256

Card 7/10

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOKOLKOV, Ye.N.; PETROVA, S.N.; CHURRAKOVA, N.P.

Effect of plastic deformation in the austenitic state on properties of structural alloy steels. Metalloved. i term. obr. met. no.5:12-14 My '61. (MIRA 14:5)

1. Institut fiziki metallov AN SSSR.
(Steel, Structural--Testing)
(Deformations (Mechanics))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOKOLKOV, E. N.[Sokolkov, Ye.N.]; PETROVA, S. N.; CIUPRAKOVA, N. P. [Chuprakova, N. P.]

Influence of austenite plastic deformation on the properties of the structural alloy steel. Analele metalurgie 15 no.4:124-127 O-D '61.

(Austenite) (Steel--Heat treatment)
(Deformations(Mechanics)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOKOLKOV, Ye.N.; PETROVA, S.N.

Influence of plastic deformation in the austenite form on the character of 35KhGSA steel failure under the effect of temper brittleness. Fiz.met. i metalloved. 7 no.2:306-308

1. Institut fiziki metallov AN SSSR.
(Steel--Brittleness)
(Metallography)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOKOLKOV, Ye.N.; PETROVA, S.N.

Mechanism of the effect of plastic deformation in the austenite state on temper brittleness. Fiz.met. i metalloved. 6 no.4: 762-764 '58. (MIRA 11:12)

1. Institut fiziki metallov Ural'skogo filiala AN SSSR.
(Deformations (Mechanics)) (Steel--Brittleness)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOV/126-6-4-30/34

AUTHORS: Sokolkov, Ye. N. and Petrova, S. N.

TITLE: On the Mechanism of the Effect of Plastic Deformation in the Austenitic State on the Temper Brittleness (O mekhanizme deystviya plasticheskoy deformatsii v austenitnom sostoyanii na otpusknuyu khrupkost')

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 4 pp 762-764 (USSR)

ABSTRACT: Transition to brittle fracture (cold brittleness temperature) is closely associated with the ratio of the yield point to the brittle strength of the material. Steynburg and Popov (Ref 5) found that for the case of temper brittleness a high temperature of transition to brittle fracture is the result of a reduced magnitude of the brittle strength. The authors of this paper considered it of interest to establish the reasons for a decrease in the temperature of transition to brittle fracture of steel in the state of temper brittleness caused by thermo-mechanical treatment. It was assumed that the observed decrease in the temperature of transition to brittle fracture is due to an increase of

Card 1/4

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On the Mechanism of the Effect of Plastic Deformation in the Austenitic State on the Temper Brittleness

the brittle strength. This seemed likely since the mechanical treatment leads to a suppression of the brittle fracture along the boundaries of the austenite grain which is characteristic for temper brittleness whilst a weakening of the grain boundaries during the evolution of phenomena causing temper brittleness brings about a reduction in the brittle strength. To verify this assumption, the brittle strength was determined for specimens of steel 20KhNZ after hardening from 1250°C, preliminary tempering at 650°C followed by rapid cooling and subsequent tempering at 5[illegible]°C for 4 hours; the impact strength was 1.[illegible] kgm/cm² with a sharply pronounced brittle intercrystallite fracture. To enable easier observation of the development of the brittleness and also for obtaining a grain size as large as practicable, the applied hardening temperature was higher than usual. The thermo-mechanical treatment consisted of deformation by rolling on a laboratory hand-driven stand with a reduction of 23% at a speed of 5.7 m/min. The heating temperature was 1250°C. However,

Card 2/4

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SOV/12[illegible]

On the Mechanism of the Effect of Plastic Deformation in the Austenitic State on the Temper Brittleness

the deformation was effected at 900°C so as to suppress recrystallisation of the work-hardened austenite. Hardening of the deformed specimens was effected immediately after rolling so that the time interval from the ending of the rolling to the instant of hardening was 0.1 to 0.2 sec. From the rolled material, small specimens of a diameter of 3.5 mm and non-standard impact specimens of 5.5 x [illegible].5 x 55 mm were prepared. Similar specimens were also produced and hardened in the normal way. The impact and the tensile specimens were manufactured after the final heat treatment, namely, tempering at 550°C for 4 hours. On the basis of the obtained results it is concluded that the reduction in the temper brittleness observed in the case of [illegible] plastic deformation in the austenitic state with hardening under conditions excluding recrystallisation

Card 3/4

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[illegible]

[illegible] the Mechanism of the [illegible]
Austenitic State on the [illegible]

[illegible] of the work [illegible] austenite is [illegible]
in the britt[illegible]
There are 5 Soviet references

ASSOCIATION: Institut fiziki metallov Ural'skogo [illegible] AN [illegible]
(Institute of Metal Physics, Ural Branch of the
Ac.Sc. USSR)

SUBMITTED: December 7, 1957

Card 4/4

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SADOVSKIY, [illegible]; SOKOLOV, Ye.N.; [illegible], M.G.; PETROV, S.N.;
ANTIPOVA, Ye.I.; [illegible], M.G.; [illegible], [illegible]

Effect of hot working on the heat-resistant properties of austenitic steel. Issl. po zharopr. splav. 7:202-209 '61. (MIRA [illegible])
(Steel alloys--Thermal properties) (Rol[illegible] (Metal[illegible]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

22547
S/129/61/000/005/003/003
E073/E535

1 1710 also 4016, 1413, 1474

AUTHORS: Sokolkov Ye N, Petrova S N and Chuprakova N P

TITLE: Influence of Plastic Deformation in the Austenitic State on the Properties of Constructional Alloy Steels

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov 1961, No 5, pp 12-14

TEXT: The authors investigated the influence of high temperature plastic deformation on the mechanical properties under tension at sub-zero temperatures. In earlier work (Ref 1: L V Smirnov, Ye. N Sokolkov, V D Sadovskiy, Trudy instituta fiziki metallov, No 18, 1956; Ref 2: Ye N Sokolkov, L V Smirnov Metallovedeniye i obrabotka metallov, No 3, 1957) it was established that thermomechanical treatment weakens the tendency to temper brittleness M M Shteynberg and A A. Popov (Ref 3: Zavodskaya laboratoriya, No 11 1952) found that constructional alloy steel which is in the temper brittle state fractures along the boundaries of the austenitic grain as a result of tensile stresses applied at low temperatures For the experiments a Cr-Mn-Si steel of a high sensitivity to temper brittleness was chosen (composition: 0 30% C 1 06% Cr, 1 2% Mn, 1 05% Si 0 02% P.

Card 1/ 4

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Influence of Plastic Deformation . S/129/61/000/005/003/003
E073/E535

0 023% S) Plastic deformation was carried out at 900 1000. 1100 and 1200°C on a laboratory hand-operated rolling stand The rolling speed was 5 7 m/min. the reduction was 30% Blanks 10 x 10 x 55 mm were heated to 1250°C in graphite tubes and held at this temperature for one hour (the increased heating temperature ensured observation of failures). following that the blanks were cooled with the furnace to 1200 1100, 1000 and 900°C A part of the specimens were then subjected to rolling from these initial temperatures whilst another part was quenched in oil For fixing the structures produced as a result of plastic deformation after rolling the specimens were rapidly (0 3 to 0 4 sec) quenched From both types of specimens tensile test specimens of 3 5 mm diameter were produced Preliminarily all the blanks were tempered at 550°C for 2 hours The tensile tests at -195°C were carried out in a special attachment fitted to the test machine 1M-4P (IM-4R) The results are plotted in Fig 1 the real breaking strength s_k kg/mm^2 the elongation δ % δ % vs hot working temperature °C, whereby the dashed lines apply to ordinary quenching (without hot working) whilst the continuous

Card 2/ 4

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22547

Influence of Plastic Deformation ... S/129/61/000/007/007/009
E073/E335

lines refer to the specimens which were subjected to thermo-mechanical treatment. It can be seen that the strength and ductility at -195°C increases most as a result of thermomechanical treatment at 900°C; mechanical deformation at higher temperatures leads to deterioration of the properties. Similar results were also obtained for the steels (20KhN3), (30KhN2S). The microstructure was also studied after each regime of thermo-mechanical treatment. After ordinary quenching, the fractures show boundaries of austenitic grains, whilst after thermo-mechanical treatment the fractures show intracrystalline planes and only in individual spots can austenite grain boundaries be detected. An increase in the temperature of the thermomechanical treatment to 1000°C and higher leads to a recrystallization of the work-hardened austenite which begins at the boundaries of the austenitic grains. With increasing recrystallization, the ductility and the strength decrease. The experiments have shown that as a result of the thermomechanical treatment the brittle strength of the austenite grain boundaries increases, reducing the temperature of transition to the embrittled state. There are 1 figure and 6 Soviet references:

Card 3/4

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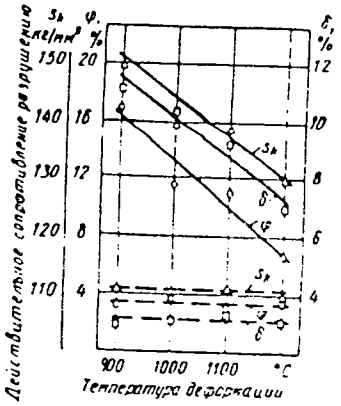
"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

22547

Influence of Plastic Deformation ... S/129/61/000/005/007/003
E073/E535

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

Fig.1



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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

18(3), 18(7), 24(6) SOV/126-7-2-31/39

AUTHORS: Sokolkov, Ye. L. and Petrov, S. L.

TITLE: Influence of Plastic Deformation of Steel 35KhGSA in the Austenitic State on the Nature of Fracture in the Temper Brittle Condition (Vliyaniye plasticheskoy deformatsii v austenitnom sostoyanii na kharakter razrusheniya stali 35KhGSA v sostoyanii otpuskhoy khrupkosti)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 306-308 (USSR)

ABSTRACT: Plastic deformation of metals in the austenitic state, combined with quenching, under conditions which exclude recrystallization of the formed austenite results in a decrease in the development of temper brittleness (Refs 1,2). In this case a lowering of the transition temperature of brittle fracture, as well as suppression of a characteristic temper brittleness fracture along the boundaries of the austenitic grains that existed prior to quenching of the steel (Ref 1), can be observed. In series experiments, steel fractures in the case of brittle fracture, after thermo-mechanical treatment, occur not along the austenitic grain boundaries as after

Card 1/6

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[illegible]V/126-[illegible]-31/[illegible]

Influence of Plastic Deformation of Steel 35KhGSA in the Austenitic State on the Nature of Fracture in the Temper Brittle Condition

normal quenching, but across the grain bodies. Brittle fracture along the austenite grain boundaries does not occur even when the testing temperature is lowered to -195°C (Ref 3). The conclusions arrived at as to the nature of fracture are based on a microscope study of the appearance of the fracture at a magnification of x [illegible]. These conclusions are in a certain measure subjective and hence special investigations were necessary. To this end a study was carried out in which the nature of the failure of steel 35KhGSA in the brittle state, after normal quenching and after thermo-mechanical treatment, was investigated by a known method, involving destruction of the specimen at a sufficiently low temperature, and compared with a previously prepared and etched microsection (Ref 4). In order best to be able to observe the characteristics of brittle fracture, the steel was heated to a temperature of 250°C prior to quenching. Plastic deformation in the process of thermo-mechanical treatment was carried out at 900°C (on

Card 2/6

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

[illegible]V/126-[illegible]-31/[illegible]

Influence of Plastic Deformation of Steel [illegible] in the Austenitic State on the Nature of Fracture in the Temper Brittle Condition

cooling from 1[illegible]50°C); [illegible] temperature to be lowered [illegible] facilitate suppression of recrystallization [illegible] worked austenite, as exclusion of recrystallization is the main condition for carrying out a thermomechanical treatment. Deformation was carried out [illegible] in a laboratory hand-roller, in which [illegible] of 10 x 10 mm was reduced to one of [illegible] The [illegible] speed was [illegible].7 m/min. [illegible] also after heating to [illegible] control and deformed [illegible] for 4 hours. A section [illegible] of the specimen, [illegible] etched in a solution of [illegible] expose the austenite grains. In Fig 1 [illegible] the structure in the [illegible] of a specimen having [illegible] is shown. In Fig 2 a photo [illegible] of the [illegible] section is shown after the [illegible] had fractured [illegible]

Card 3/6

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

[illegible]/126-7-[illegible]-31/[illegible]

Influence of Plastic Deformation of [illegible] in the Austenitic State on the Nature of Fracture in the Temper Brittle Condition

temperature of -195°C. Wh[illegible] failure of a [illegible], having undergone normal [illegible], takes place [illegible] boundaries of austenite [illegible] form on [illegible] the steel prior to quenching [illegible] F. Yur'yev and Z. P. Kusnitsina (Ref 4) [illegible] this [illegible] by means of the method under [illegible] deformed at 900°C and quenched [illegible] exclude recrystallization of the [illegible] in such a way that the [illegible] anywhere with the austenite [illegible] occurs across the [illegible] In Fig 1 the line of demarc[illegible] boundaries of failure in [illegible] Thus, it [illegible] deformation [illegible] together with quenching under conditions of reversible temper brittleness develo[illegible] characteristic [illegible] brittleness along the [illegible] boundaries [illegible] suppressed. It is impossible [illegible] the relationship

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[illegible]

Influence of [illegible] State [illegible] Nature of Fr[illegible]

between t is fact [illegible] arise when [illegible] [illegible]ied. These changes consist, [illegible], in a [illegible] of the shape of the aust[illegible] grains - a pronou[illegible] serration, the period [illegible] is many times [illegible] the cross-sectional [illegible] of the grain ([illegible]). In some cases, however, [illegible] serration is observed. Special experiments have [illegible] that this depends [illegible] temperature of pla[illegible]ion. We shall not deal with this problem specifi[illegible] [illegible] isation of deformati[illegible] boundaries, which can be [illegible] out a fairly wide temper[illegible] from the point of view [illegible] effect when serration [illegible] assumed that a localis[illegible] the austenit[illegible] intergranular [illegible] which can alter the [illegible] tation of such phases [illegible] ness (Ref 1). In fact, [illegible]

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Influence of Plastic Deformation [illegible] State on the Nature of Fracture [illegible]

distortions of the austenitic grain [illegible] cannot leave unaltered [illegible] components responsible [illegible] development [illegible] brittleness. The form [illegible] brittle [illegible] film-, plate-, or net-like [illegible] prevents the propagation [illegible] brittle fracture [illegible] the austenitic grain [illegible] after hot [illegible]. It should not be assumed, however, that [illegible] failure along the austenitic [illegible] boundaries [illegible] excludes development [illegible] brittleness. [illegible] experiments have shown [illegible], [illegible] thermomechanical treatment, [illegible], [illegible] only to a very slight [illegible], [illegible] temperature tempering. [illegible] conclusion which is important [illegible] brittleness: processes causing the development [illegible] brittleness essentially along the austenitic grain boundaries, also take place throughout the grain [illegible], but their intensity is insignificant. There are [illegible] figures and 4 Soviet references.

(Note: This is a complete translation except for [illegible])

Card 6/6

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of [illegible] Physics, Ac.Sc. USSR)

SUBMITTED: December 21, 1957

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOV/126-6-2-1[illegible]/24

AUTHORS: Sokolkov, Ye. N., Smirnov, L. V. and Petrova, S. I.

TITLE: Influence of Thermo-mechanical Treatment Under Conditions of Forging on the Impact Strength of Alloy Steels (Vliyaniye termomekhanicheskoy obrabotki v usloviyakh kovki na udarnuyu vyazkost' konstruktsionnykh legirovannykh staley)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol [illegible], No [illegible], pp 276-280 (USSR)

ABSTRACT: In earlier work (Refs.1-3) it was established that combination of hot rolling of steel in the austenitic state with a hardening regime such as to eliminate recrystallisation of austenite enables to reduce the drop in impact strength after tempering at temperatures at which temper brittleness develops. The authors considered it of interest to study the effect of such "thermo-mechanical" treatment under conditions of free forging. The experiments were effected on the commercial steels 17KhNZA and 35KhGSA. As blanks, beams of 20 x 20 x 200 mm were used; the forging was effected by means of a pneumatic hammer with a reduction of 20%. Four differing regimes were used, namely: heating to 1150°C, cooling down to 650°C,

Card 1/4

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SOV/1[illegible]-6-1-[illegible]/4

Influence of Thermo-mechanical Treatment under Conditions of Forging on the Impact Strength of Alloy Steels

forging, quenching; heating to 1150°C, fo[illegible], heating to 1150°C, cooling to 950°C, for [illegible] a furnace (1150°C for 5 minutes), quenc[illegible] 1150°C, quenching. The cooling to 95[illegible] a means of impeding possible recrystal[illegible] forging. For the same reason the time [illegible] obtaining the desired reduction was re[illegible] possible minimum and amounted to 4-5 se[illegible] followed immediately by quenching. Afte[illegible] standard specimens of 10 x 10 x 60 mm were [illegible] grinding for impact bend tests. All the [illegible] tempered at a temperature at which reversible [illegible] brittleness occurs (550°C for four hours). On [illegible] finally machined specimens a notch 2 mm [illegible] with a curvature radius of 1 mm at the bo[illegible] of [illegible] notch was produced. The obtained impact stre[illegible] hardness values are given in a table, p. 7. [illegible]-structure photographs and photographs of fracture [illegible] reproduced. It was found that "thermo-mech[illegible] treatment under conditions of forging as well [illegible]

Card 2/4

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SOV/126-6-2-12/24

Influence of Thermo-mechanical Treatment Under Conditions of Forging on the Impact Strength of Alloy Steels

conditions of rolling brings about a reduction of the sensitivity of the steel to develop reversible temper brittleness. In both cases this effect is associated with the localisation of the deformation along the boundaries of the austenite grains of the initial [illegible], distortions in the crystal lattice of the intergranular transient zones (which are conserved after hardening) and the thereby caused change in the form of the phases and compounds which are responsible for developing temper brittleness. The here described effect of thermo-mechanical treatment can also be observed in other types of hot working as, for instance, stamping and extrusion, under conditions such that recrystallisation of work-hardened austenite is prevented.

Card 3/4

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SOV/126-6-[illegible]-1. [illegible]

Influence of Thermo-mechanical Treatment Under Condit[illegible] f Forging on the Impact Strength of Alloy Steels

There are 3 figures, 1 table and 4 refere[illegible], 3 [illegible] which are Soviet, 1 German.

ASSOCIATION: Institut fiziki metallov Ural'skogo filiala A[illegible] (Institute of Metal Physics, Ural Branch of the Ac.Sc. USSR)

SUBMITTED: November 19, 1956.

Card 4/4 1. Steel--Mechanical properties 2. Steel--Temperature [illegible]
3. Steel--Test results

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

SADOVSKIY, V.D.; MALYSHEV, K.A.; SOKOLKOV, Ye.N.; SMIRNOV, L.V.; BOGACHEVA, G.N.; BIRYULIN, V.T.; PETROVA, S.N.

Effect of plastic deformation at high temperatures on temper brittleness and aging of hardened steels. Issl. po zharopr. splav. 2:76-91 '57. (MIRA 11:2)

(Steel--Brittleness)
(Metals at high temperatures)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.S.

Analysis of the modeling of a nonuniform network using d.c. Trudy LPI no.242:[illegible] '65. (MIRA 18:8)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

KOVALEVSKAYA, I.L.; EPSHTEYN-LITVAK, R.V.; DMITRIYEVA-RAVIKOVICH, Ye.M.; KURNOSOVA, N.A.; SHCHEGLOVA, Ye.S.; FERDINAND, Ya.M.; KHOMIK, S.R.; MAKHLINOVSKIY, L.P.; PETROVA, S.S.; GOLUBOVA, Ye.Ye.; GONCHAROVA, Z.I.; SARMANEYEV, A.P.; SIZINTSEVA, V.P.; Prinimali uchastiye: MEDYUKHA, G.A.; OSOKINA, L.A.; RACHKOVSKAYA, Yu.K.; OSOVTSEVA, [illegible].I.; DEDUSENKO, A.I.; KOVALEVA, P.S.; KARASHEVICH, V.P.; CHEBOTAREVICH, N.D.; CHIGIR', T.R.; SKUL'SKAYA, S.D.; KECHETZHIYEV, B.A.; DEMINA, A.S.; ZUS'MAN, R.T.; YESAKOV, P.I.; SYSOYEVA, Z.A.; ZINOV'YEVA, I.S.; FAL'CHEVSKAYA, A.A.; DENISOVA, B.D.; TIMOFEELEVA, R.G.; SYRKASOVA, A.V.; LYANTSMAN, S.G.

Reactivity and immunological and epidemiological effectiveness of alcoholic typhoid and paratyphoid fever vaccines in school children. Zhur. mikrobiol., epid. i immun. 33 no.7:72-77 Jl '62. (MIRA 17:1)

1. Iz Moskovskogo, Rostovskogo, Omskogo institutov epidemiologii i mikrobiologii, Stavropol'skogo instituta vaktsin i syvorotok i Ministerstva zdravookhraneniya RSFSR. 2. Rostovskiy institut epidemiologii i mikrobiologii (for Kovaleva). 3. Stavropol'skiy institut vaktsin i syvorotok (for Sysoyeva). 4. Kuybyshevskiy institut epidemiologii i mikrobiologii (for Zinov'yeva). 5. Saratovskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya (for Lyantsman).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

15-57-4-4975

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 132 (USSR)

AUTHORS: Chemodanov, D. I., Gavrilova, Z. Ya., Petrova, S. V.

TITLE: Autoclave Processed Clay-Base Silicate Materials (Issledovaniye avtoklavnykh silikatnykh materialov na osnove suglinkov)

PERIODICAL: Sb. nauch. tr. Tomskiy inzh.-stroit. in-t, 1956, Vol 1, pp 3-7

ABSTRACT: Argillaceous soils of the Kopylovka deposit (Western Siberia) and limestone slaked by heating may be used for manufacture of lime-silica products. The limestone is obtained from one of the deposits of the Novosibirsk Region. The chemical composition of the argillaceous soil is as follows (in percent): SiO_2--68.66, Al_2O_3--12.44, Fe_2O_3--8.30, CaO--0.70, MgO--1.20, Na_2O and K_2O--1.21; SO_3---, other constituents--

Card 1/2

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15-57-4-4975

Autoclave Processed Clay-Base Silicate Materials (Cont.)

6.50. A silicate brick of satisfactory quality was obtained from a raw material mixture of argillaceous soil with 8 percent active calcium and magnesium oxides.

S. P. Sh.

Card 2/2

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L 35603-65 EWT(d)/EWT(m)/EWP(f)/EPR/T-2/EWA(c) S/0286/65/000/002/0073/0073
ACCESSION NR: AP5004966

AUTHORS: Karnitskiy, V. V.; Minkin, M. L.; Lozar', A. S.; Shaydorov, P. L.; Petrova, S. V.; Goryunov, V. G.

TITLE: Device for starting internal combustion engines at low temperatures. Class 46, No 167704

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 2, 1965, 73

TOPIC TAGS: ignition system

ABSTRACT: This Author Certificate describes a device for starting an internal combustion engine (example: V-block diesel). The device has space for an easy-to-ignite starter liquid which is fed to an intake track. A mixer receives the intake emulsion, and a compressed air supply turns the liquid into a spray. The mixer is multichanneled so that the emulsion flows to one or a group of sprayers. This ensures transmission of the emulsion to any or all cylinders of the engine block. The device is shown in Fig. 1 on the Enclosure. Orig. art. has: 1 figure.

Card 1/2

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ACCESSION NR: AP5004966

ASSOCIATION: Tsentral'nyy ordena trudovogo krasnogo znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut (Central Order of the Trudovoye Krasnoye Znameniye Scientific Research Automobile and Automotive Institute)

SUBMITTED: 24Dec62 ENCL: 01 SUB CODE: PR

NO REF SOV: 000 OTHER: 000

Card 2/3

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PETROVA, Stella Vladimirovna; VOLKOVA, Nina Mikhaylovna; SARANTSEVA, L.S., retsenzent; IGNATOVA, G.I., retsenzent; BYCHKOVA, G.I., red.

[Technology of the tailoring of men's suits] Tekhnologiia poshiva muzhskikh kostiumov. Moskva, Legkaia industriia, 1964. 269 p. (MIRA 18:1)

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PETROVA, S.V.

[Development of [illegible] industries; index of recommended literature] Bol'shaia khimiia; rekomendatel'nyi ukazatel' literatury. Moskva, 1963. 16 p. (MIRA 17:7)

1. Moscow. Gosudarstvennaya publichnaya nauchno-tekhnicheskaya biblioteka.

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PETROVA, S.V., insh.

Need for a new freight car loading index and an improved method for evaluating the economic efficiency of increased loading. Vest.TSNII MPS 18 no.6:43-46 S '59. (MIRA 13:2)

(Railroads--Freight)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.V.; MEYLITSEVA, T.I.

Reorganize the edition of literature for workers. Mashinostroitel' no.7:47 Jl '62. (MIRA 15:7)
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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240610003-4

PETROVA, S.V., red.; KUZNETSOVA, M.A., red. izd-va; KONDRAT'YEVA, M.A., tekhn. red.

[Instructions 204-57 for checking echo boxes in the decimetric range] Instruktsiia 204-57 po poverke ekho-rezonatorov detsimetrovogo diapazona. Izd. ofitsial'noe. Moskva, 1957. 11 p. (MIRA 14:5)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.
(Electric resonators--Testing radar)

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PETROVA, S.V., red.; KUZNETSOVA, M.I., red. izd-va; KONDRAT'YEVA, M.A., tekhn. red.

[Instructions 206-57 for checking heterodyne frequency meters] Instruktsiia 206-57 po poverke geterodinnykh chastotomerov. Izd. ofitsial'noe. Moskva, 1958. 7 p. (MIRA 14:5)

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