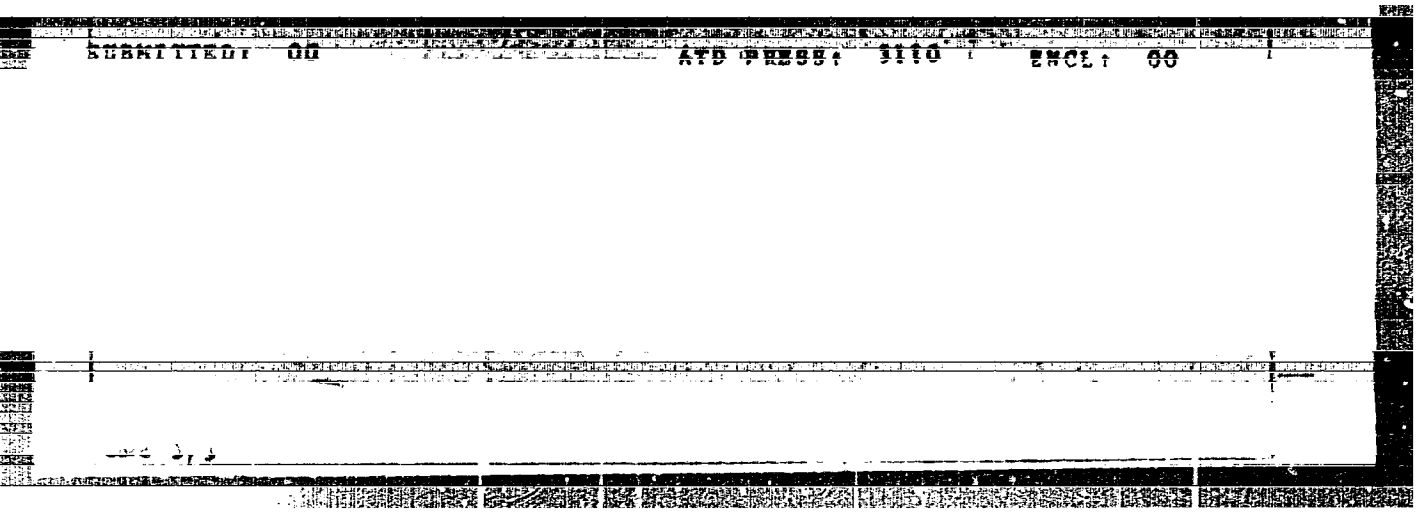
"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACC NR: AP7002430 SOURCE CODE: UR/0129/66/000/012/0015/0021

AUTHOR: Klypin, B. A.; Gulyayev, A. P.; Morgunova, N. N.

ORG: TsNIIChERMET

TITLE: Mechanical properties of refractory metals

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 12, 1966, 15-21

TOPIC TAGS: refractory metal, high temperature strength, mechanical property, plasticity, transition temperature, impurity content, crystal structure, grain size, annealing, metallographic examination, TENSILE TEST, CRYSTAL DISLOCATION, TEMPERATURE DEPENDENCE

ABSTRACT: Data on Ni, Nb, Ta, Mo, and W were correlated and the temperature dependence of the mechanical properties determined. Tensile testing was done at temperatures ranging from -196 to 2500°C and the strength was given as a logarithmic function of the homologous temperature T/T_m, where T_m is the melting point and T is the test temperature. Three different slopes were obtained for the bcc metals (Nb, Mo), at the following temperature intervals: below 0.2 T_m, 0.2-0.5 T_m, and above 0.5 T_m. These changes were due to different dislocation mechanisms. For Ni, an fcc metal, no slope change occurred between the first and second regions. The location of the first interval depended mainly on the metal and the deformation rate, and only slightly on

UDC: 620.17:669.293'28'27

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACC NR: AP7002430

the impurity content. The position of the high temperature region did not depend on the crystal lattice type or impurity content, but was a function of strain rate. The strength and ductility of Mo were given as functions of temperature for different impurity contents and a constant grain size (No. 5-ASTM). Similar tests were also done for the deformed and annealed conditions. The strength rose sharply as the temperature decreased for all tests. Impurities and structural changes affected the ductility and the ductile-brittle transition temperature. With a decrease in impurity content (C, O, N, H), the transition temperature decreased. The grain size dependence of W, Mo, and Cr on the transition temperature was given as

$$T_{br} = A + B \lg d_{av}$$

where A and B are constants and d_{av} is the average recrystallized grain size. Impurities and structure had the most effect on the strength in the intermediate temperature range. Above 0.5 T_m the temperature dependence of strength was given by

$$\sigma = \alpha' e^{-m' T/T_m}$$

where α' and m' are coefficients which depend on the testing method and strain rate. Microstructures of TsM-2A (Mo alloy) are shown after various deformations at 1670 and 2070°C. After 10-15% deformation at 1400-2400°C elongated grains and substructure were visible. Only after 60-80% deformation at 2070°C did an equiaxed structure appear. Orig. art. has: 6 figures, 1 table, 3 formulas.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 011

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4035094 S/0032/64/000/005/0610/0611

AUTHOR: Klyapin, B. A.

TITLE: A plant for accelerated trials on strain and stress rupture strength with heating of the specimen by passing current

SOURCE: Zavodskaya laboratoriya, no. 5, 1964, 610-611

TOPIC TAGS: material strength, elasticity, rupture strength, / IMet 1 testing machine, OSU 20 transformer, RNO 250 10 autotransformer, TsEP 3 light pyrometer

ABSTRACT: The makeup of a machine designed for high-speed variable temperature testing of metals and metal alloys is described. A sectional view of the machine is shown in Fig. 1 on the Enclosures. (1) and (2) are the upper and lower electrically insulated holders. The sample is heated by means of an electric current of industrial frequency conducted to the tip of the specimen through the holders and brass conductors (3). The bottom holder is based on a spring (4) and joined with the core of an electromagnet of constant current (5). The load on the specimen is measured by a wire stress gauge attached to dynamometric element (6). Strains are measured by the device at (7). Figure 2 on the Enclosures shows a typical deformation with load and temperature curve. Stress is represented by P,

Card 1/4

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4035094

Δl is elongation and T is temperature. Stress $P_{0.2}$ corresponds to the point S at which slope of the curve $\Delta l = f(T)$ is the linear relationship $0.002\ l_0 \cdot M(mm)$ where l_0 is the unstressed sample length and M is the scale of elongation of the oscillogram. The author states that the high degree of facility of the machine permits rapid determination of temperature versus elasticity and plasticity characteristics and the influences of heat and stress upon the mechanical properties of materials. Tests performed using molybdenum alloys with temperatures in the range 1400-2600C, and with test duration from 10 seconds to 100 minutes are described. Their results compared favorably with those of tests of the same material using oven heating in a vacuum. Orig. art. has: 2 figures.

ASSOCIATION: Tsentral'ny*y nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy)

SUBMITTED: 00 ENCL: 02

SUB CODE: MT NO REF SOV: 000 OTHER: 000

Card 2/4

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4035094

ENCLOSURE: 01

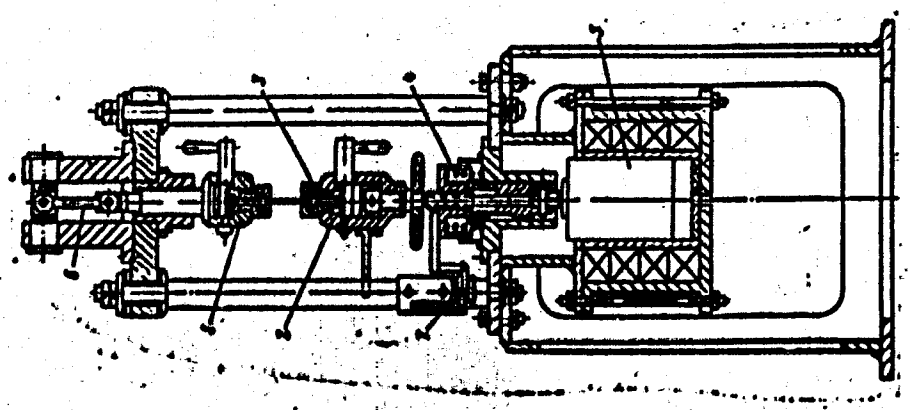


Fig. 1. Scheme of the plant for accelerated tests on strain.

Card 3/4

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4042343 S/0129/64/000/007/0007/0011

AUTHOR: Kly*pin, B. A.

TITLE: Effect of temperature on mechanical properties of certain pure metals

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 7, 1964, 7-11

TOPIC TAGS: molybdenum, niobium, nickel, molybdenum mechanical property, niobium mechanical property, nickel mechanical property, molybdenum property temperature dependence, niobium property temperature dependence, nickel property temperature dependence

ABSTRACT: Mechanical properties of molybdenum, niobium, and nickel were studied at temperatures ranging from -146C to temperatures close to the melting points (Tm). Molybdenum specimens had a total impurity content (C, O, H, N, Fe, Si) of approx 0.012%; niobium specimens, approx 0.24%; and nickel, approx 0.33%. Following annealing (at 1500C for Mo, 1350C for Nb, and 1000C for Ni) to obtain a recrystallized structure, the specimens were tested 1) in

Card 1/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4042343

an argon atmosphere at deformation rates of $(0.8—2.4)\cdot10^{-2}$/sec in the elastic region and 1—4/sec in the plastic region or 2) in air at deformation rates $(0.5—1.5)\cdot10^{-4}$/sec in the elastic region and $1.1\cdot10^{-3}$/sec in the plastic region. Changes in mechanical properties at low temperatures are found to depend upon the type of crystal lattice. For instance, nickel, which has an fcc lattice, maintains its yield strength and ductility at temperatures as low as -196C. On the other hand, the yield strength of molybdenum and niobium, which have a bcc lattice, increases rapidly at low temperatures. Both metals display a sharp transition to brittle behavior. The yield strength of niobium rises at a temperature lower than that of molybdenum; the transition to brittle behavior in molybdenum occurs at approximately 100C and that of niobium at -196C. This difference can be explained by different solubility of interstitial impurities. Three distinct temperature regions can be distinguished in the curves of temperature dependence of molybdenum and niobium mechanical properties. At temperatures below 0.15—0.2 Tm, the tensile and yield strength increase with decreasing temperature, but the ductility drops sharply. At 0.2—0.5 Tm, changes in the mechanical properties are insignificant. At temperatures above 0.5 Tm, the effect of recrystallization

Card 2/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4042343

becomes apparent; the tensile and yield strengths drop, the former at a higher rate than the latter. At 0.5—0.75 Tm, numerous cracks are observed on the metal surface, at grain boundaries. The fractures, however, remained transgranular. At all temperatures tested, the rate of deformation has no substantial effect on the pattern of changes in the mechanical properties of molybdenum, niobium, and nickel with temperature; properties of nickel are not affected by the deformation rate at temperatures up to 400C, but at higher temperatures, the effect of the deformation rate increases. The mechanical properties of molybdenum are strongly affected at low temperatures by the deformation rate. Niobium at low temperatures is insensitive to the rate of deformation. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: TsNIIChM

SUBMITTED: 00 ATD PRESS: 3069 ENCL: 00

SUB-CODE: MM NO REF SOV: 005 OTHER: 006

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

which ensures a sufficiently constant test temperature. Report and subsequently

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ASSOCIATION: [illegible] institut chernoy metallurgii [illegible]
(Central Scientific Research Institute of Ferrous Metallurgy)

[illegible] ENC[illegible] [illegible] MM,TD

[illegible] OTHER [illegible] [illegible] 4035

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AT5016065 ENCLOSURE: 01

Card 4/4

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYPINA, A.

Economic work in a State Bank office. Den. i kred 17 no.12:54-57 D '59. (MIRA 12:12)
(Rostov-on Don--Banks and banking)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYPKIN, B., polkovnik

Tactical airborne landings; survey of the foreign military press. Voen. vest. 38 no. 8:79-86 Ag '58. (MIRA 11:7)
(Airborne troops)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYPKIN, B., podpolkovnik

Aggressive bloc of the NATO and its armed forces. Voen. vest. 41 no.3:120-123 Mr 62. (MIRA 15:4)
(North Atlantic Treaty Organization)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYPKIN, B., polkovnik, kand.voyennykh nauk

Motorized infantry battalion of the Federal Republic of Germany in basic types of combat. Voen. vest. 42 no.5:113-117 My '63. (MIRA 16:5)

(Germany, West--Motorization, Military)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

SAROSIEK, J.; KLYS, B.

Observations on the tin content in the plants and soil of the Sudetes. Acta soc botan Pol 31 no.4:737-752 '62.

1. Katedra Ekologii i Geografii Roalin, Uniwersytet, Wroclaw,

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

GENKIN, M. D., [illegible], I. A.

"A Machine Tool for Balancing Crankshafts", Stanki i Instrument, 10, no. 7, 1939, Engineer.

Report U-1505, 4 Oct 1951.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

11-D

CA

Biochemical study of Anabasis aphylla. L. K. Klyshev. *Izvest. Akad. Nauk Kazakh. S.S.R., Ser. Pisiol. i Biokhim. Rastenii*, No. 2, (Whole No. 30), 60-57(1947).—Voluminous material is presented on the alkaloid contents of the plant under different conditions. Total alkaloids decline from 4.65% in May to 1.88% in August. A slight rise during fruit ripening gives a max. of 2.95%. The abs. content of alkaloids, however, shows a constant rise with plant growth and is max. at fruit-ripening period. Anabasine is the principal alkaloid (73% in May) rising in importance in later months (80% in October). Percentage alkaloid content is greatest in young plants. Carbohydrate content remains constant throughout vegetative period. Polysaccharides predominate in this group, while 3-4% mono- and disaccharides are found. Considerable hemicellulose and pectins are always present. The less mineralized soils tend to give higher yields of total alkaloids. N fertilizers promote alkaloid accumulation; P fertilizers have but a weak effect. The green subspecies of the plant is more alkaloid-bearing than the bluish subspecies. G. M. Kosolapoff

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

C.A.

15F

Utilization of Anabasis aphylla without chemical plant treatment. L. K. Klyshev. *Vestnik Akad. Nauk Kazakh. S.S.R.* 4, No. 1/2(22/23), 66-8(1947).—Nine simple aq. extns. suffice for extn. of 84.6% of total alkaloid content of the dry plant matter with a 2-hr. extn. period each time. The extn. are satisfactory for insect pest control; this is especially true of the 1st 4-5 extn. No chem. app. is necessary. G. M. Kosolapoff

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L. K.

USSR

Experiments in the use of waste from the Kazakhstan copper-mining industry as a microfertilizer. L. K. Klyshev and E. A. Gryzhova. *Uchenye Zapiski Alma-Atinskogo Gosudarst. Pedagog. i Uchitel'sk. Inst.* 1, No. 2, 89-101(1953); *Referat. Zhur., Khim.* 1954, No. 3,330.—Preliminary tests were made on the use of 2 kinds of waste from the Balkhash Copper Industry for supplying minor elements. It is recommended for use on sugar beet and tobacco fields.

M. Hirsch

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

NAZARENSKIY, S.I.; MAKAROV, S.N.; PILIPENKO, F.S.; GERASIMOV, M.V.; IL'INSKAYA, M.L.; VEKSLER, A.I.,[deceased]; VASIL'YEV, I.M.; IL'INA, N.V.; SOKOLOV, S.Ya.; LOZINA-LOZINSKAYA, A.S.; SAAKOV, S.G.;ZALESSKIY, D.M.; AVRORIN, N.A.; IVANOV, M.I.; PRIKLADOV, N.V.; SOBOLEVSKAYA, K.A.; SALAMATOV, M.N.; MALINOVSKIY, P.I.; LUCHNIK, A.I.; KRAVCHENKO, O.A.; VEKHOV, N.K.; GROZDOV, B.V.; MASHKIN, S.; BOSSE, G.G.; PALIN, P.S.,(g.Shuya, Ivanovskoy oblasti); MATUKHIN; ZATVARNITSKIY, G.P.; GRACHEV, N.G.; CHERKASOV, M.I.; KIRKOPULO, Ye.N.; LEVITSKAYA,A.M.; GRISHKO, N.N.; LIKHVAR', D.F. VIL'CHINSKIY, N.M.; LYPA, A.L.; OREKHOV, M.V.; SHCHERBINA, A.A.; TSYGANKOVA, V.Z.; BARANOVSKIY, A.L.; GEORGIYEVSKIY, S.D.; STEPUNIN, G.A. OZOLIN, E.P.; LUKAYTEME, M.K.; KOS, Yu.I.; VAIL'IEV, A.V.; RUKHADZE, P.Ye.; VASHADZE, V.N.; SHANIDZE, V.M.; MANDZHAVIDZE, D.V.; KORNESHKO, A.L.; KOLESNIKOV, A.I.,(g. Sochi); SERGEYEV, L.I.; VOLOSHIN, M.P.; RYBIN, V.A.; IVANOVA, B.I.; RYABOVA, T.I.; GAREYEV, E.Z. ;RUSANOV, F.N.; BOCHANTSEVA, Z.P.; BLINOVSKIY, K.V.; KLYSHEV, L.K.; MUSHEGYAN, A.M.; LEONOV, L.M.

Talks given by participants in the meeting. Biul.Glav.bot.sada no.15: 85-182 '53. (MLRA 9:1)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR (for Makarov,Pilipenko, Gerasimov, Il'inskaya, Veksler); 2. Akademiya komunal'nogo khozyaystva imeni K.D. Pamfilova for Vasil'yev); 3. Vsesoyuznaya sel'skokhozyaystvennaya vystavka (for Il'ina); 4. Botanicheskiy sad Botanicheskogo instituta imeni V.L.Komarova Akademii nauk SSSR (for Sokolov, Lozina-Lozinskaya, Saakov); 5. Botanicheskiy sad Leningradskogo

(continued on next card)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KAZANEVSKIY, S.L.---(continued) Card 2.

gosudarstvennogo ordena Lenina universiteta (for Zalesskiy); 6. Polyarno-Al'pivskiy botanicheskiy sad Kol'skogo filiala imeni S.M. Kirova Akademii nauk SSSR (for Avrorin); 7. Botanicheskiy sak pri Tomskom gosudarstvennom universiteta (for Ivanov); 8. Botanicheskiy sad pri Tomskom gosudarstvennom universiteta imeni V.V. Kuybysheva (for Pribladov); 9. TSentral'nyy Sibirskiy botanicheskiy sad Zapadno-Sibirskogo filiala Akademii nauk SSSR (for Salamatov, Sobolevskaya); 10. Botanicheskiy sad Irkutsko gosudarstvennogo universiteta imeni A.A. Zhdanova (for Malinovskiy); 11. Altayskaya plodovo-yagodnaya opytnaya stantsiya (for Luchnik); 12. Bashkirskiy botanicheskiy sad (for Kravchenko); 13. Lesostepnaya selektsionnaya opytnaya stantsiya dekorativnykh kul'tur tresta Gorzelenkhoz Ministerstva komunal'nogo khozyaystva RSFSR (for Vakhov); 14. Bryanskiy lesokhozyaystvennyy institut (for Grozdov); 15. Botanicheskiy sad pri Voronezhskom gosudarstvennom universitete (for Mashkin); 16. Orekhovo-Zuyevskiy pedagogicheskiy institut (for Bosse); 17. Botanicheskiy sad pri Rostovskom gosudarstvennom universitete imeni V.M. Moletova (for Matukhin); 18. Botanicheskiy sad Kuybyshevskogo gorodskogo otdela narodnogo obrazovaniya (for Zatvarnitskiy); 19. Zoobotanicheskiy sad pri Kazanskom universitete (for Grachev); 20. Gosudarstvennyy respublikanskiy proektnyy institut "Giprokommunstroy" (for Cherkasov); 21. Botanicheskiy sad Odesskogo gosudarstvennogo universiteta imeni I.I. Mechnikova (for Kirkopulo); 22. Botanicheskiy sad pri Dnepropetrovskom gosudarstvennom universitete (for Levitskaya); 23. Botanicheskiy sad

(continued on next card)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

NAZARENSKIY, S.L.---(continued) Card 3.

Akademii nauk USSR (for Grishko, Likhvar', Vil'chinskiy); 24. Kiyevskiy sel'skokhozyaystvennyy institut (for Lypa); 25. Botanicheskiy sad Chernovitskogo gosudarstvennogo universiteta (for Orekhov); 26. Botanicheskiy sad pri L'vovskom gosudarstvennom universitete imeni Iv. Franko (for Shcherbina); 27. Botanicheskiy sad Khar'kovskogo gosudarstvennogo universiteta imeni A.M. Gor'kogo (for Tsygankova); 28. Botanicheskiy sad Zhitomirskogo sel'skokhozyaystvennogo instituta (for Baranovskiy); 29. Botanicheskiy sad Akademii nauk Belorusskoy SSR (for Georgiyevskiy); 30. Institut biologii Akademii nauk Belorusskoy SSR (for Stepunin); 31. Botanicheskiy sad Akademii Litovskoy SSR (for Lukaytene); 32. Botanicheskiy sad Latviyskogo gosudarstvennogo universiteta (for Ozolin); 33. Kabardinskiy krayevedcheskiy botanicheskiy sad (for Kos); 34. Sukhumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Vasil'yev, Rukhadze); 35. Batumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Shanidze); 36. Tbilisskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Mandzhavidze); 37. Sochinskiy park Dendrariy (for Korkeshko); 38. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova (for Sergeyev, Voloshia); 39. Krymskiy filial Akademii nauk SSSR (for Rybin); 40. Botanicheskiy sad Moldavskogo filiala Akademii nauk SSSR (for Ivanova); 41. Botanicheskiy sad Botanicheskogo instituta Akademii nauk Tadzhikskoy SSR (for Ryabova); 42. Botanicheskiy sad Kirgizskogo filiala Akademii nauk SSSR (for Gareyev); 43. Botanicheskiy

(continued on next card)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

NAZARENSKIY, S.L.---(continued) Card 4.

sad Akademii nauk Uzbekskoy SSR (for Rusanov, Bochantseva); 44. Botanicheskiy sad Akademii nauk Turkmenskoy SSR (for Blinovskiy); 45. Respublikanskiy sad Akademii nauk Kazakhskoy SSR (for Klyshev, Mushegyan).

(Botanical gardens)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L.K.

Introduction of anabasis to cultivation. Trudy Alma-At.bot.sada 2 166-195 '54. (Anabasis (Botany)) (MLRA 9:7)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L. K.

USSR/Biology - Insecticides

Card 1/1 : Pub. 123 - 14/17

Authors : Klyshev, L. K.

Title : Methods for increasing production of Anabasis aphylla

Periodical : Vest. AN Kas. SSR 11/3 (108), 84-92, Mar 1954

Abstract : Methods for increasing production of Anabasis, plant which grows in Kazakhstan, are suggested. Anabasis-sulfate, which is considered the only effective plant insecticide, is produced from this plant. Twenty-one references (1930-1952). Tables.

Institution : ....

Submitted : ....

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L. K. Doc Biol Sci — (diss) "Biological Foundations for the Utilization and Introduction to the Culture of Anabasis aphylla L." Len, 1957. 23 pp 21 cm. (Academy of Sciences USSR, Botanical Inst im V. L. Komarow), 100 copies (KL, 17-57, 95)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ALYUKINA, L.S.; KLYSHEV, L.K.; KUNAYEVA, R.

On the problem of studying Ephedra in Kazakhstan. Izv.AN Kazakh. SSR.Ser.bot.i pochv. no.1:33-46 '60. (MIRA 13:6)
(Kazakhstan--Ephedra)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L.K., ALYUKINA, L.S.

Some data on stocks of Tatar rhubarb in the northern Aral Sea region. Vest.AN Kazakh.SSR 16 no.7:39-42 Jl '60. (MIRA 13:8)

(Aral Sea region—Rhubarb)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L. K., ALYUKINA, L. S., (USSR)

"Biochemical Aspects of Ephedra equisetina and Growth Conditions."

Report presented at the 5th Intl. Biochemical Congress, Moscow, 10-16 Aug 1961.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L. K., (USSR)

"Factors Affecting the Amount and Qualitative Composition of Anabasis aphylla Alkaloids."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, Lukban Klyshevich; MOSKVICHEVA, L.N., red.; NOROKINA, Z.P., tekhn. red.

[Biology of Anabasis aphylla L.; biological foundations of its use and cultivation] Biologiia anabazisa bezlistnogo Anabasis aphylla L.; biologicheskie osnovy ispol'zovaniia i vvedeniia v kul'turu. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1961. 350 p. (MIRA 15:2)

(Anabasis (Botany))

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KUMAYEVA, R.M.; KLYSHEV, L.K.

Biochemistry of the ripening and storage of standard apple varieties in the Alma-Ata fruit zone. Report No.1. Trudy Inst. bot. AN Kazakh. SSR. 12:219-226 '62. (MIRA 15:5)

(Alma-Ata Province--Apple--Varieties)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L.K.; ALYUKINA, L.S.

Bioecologic characteristics of some species of Ephedra. Trudy Inst. bot. AN Kazakh. SSR. 12:196-218 '62. (MIRA 15:5)
(Kazakhstan—Ephedra)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L.K.; KORDAKOV, I.A.

Dynamics of free amino acids in opium poppy in the vegetation process, and the biosynthesis of alkaloids. Vest. AN Kazakh. SSR 20 no.1:71-76 Ja '64. (MIRA 17:3)

1. Chlen-korrespondent AN Kazakhskoy SS (for Klyshev).

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHEV, L.K.; RAKOVA, N.M.

Effect of the salinization of the substrate on the protein composition of the roots of pea seedlings. Trudy Inst.bot.AN Kazakh.SSR 20:156-165 '64. (MIRA 18:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

PRIKHOD'KO, L.S.; KLYSHEV, L.K.

Nitrogen metabolism of pea seedlings as related to various salinisation types of the substrate. Trudy Inst.bot.AN Kazakh.SSR 20:166-182 '64. (MIRA 18:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

MAO TSZO-BEN' [Mao Tšo-pên]; KLYSHKO, A. [translator]; MINTANIYEVA, N., red.; TERYUSHIN, M., ~~tekhn.red.~~

[This was invented in China] Eto izobreteno v Kitae. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1959. 159 p. Translated from the Chinese. (MIRA 12:12)

(China--Inventions)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, A.A. [translator]; FAINGAR, A.A. [translator]; YURCHENKO, I.V. [translator]; MARTYNOV, A.A., red.

[Great campaign on the first front of the Chinese Workers' and Peasants' Red Army; reminiscences] Velikii pokhod 1-go fronta kitaiskoi Rabocho-krest'ianskoi Krasnoi Armii; vospominaniia. Moskva, Izd-vo inostr.lit-ry, 1959. 567 p. Translated from the Chinese. (MIRA 14:2)

(China--Army)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

VASNEVA, G.A.; GRIGOR'YANTS, V.V.; ZHABOTINSKIY, M.Ye.; KLYSHKO, D.N.; SVERDLOV, Yu.L.; SVERCHKOV, Ye.L.

Circuit for comparing the frequencies of quartz and molecular oscillators. Izv.vys.ucheb.zav.; radiofiz. 1 no.2:185-187 '58. (MIRA 11:11)

1. Institut radiotekhniki i elektroniki AN SSSR.
(Oscillations)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

SOV-109-3-4-20/28

AUTHORS: Vasneva, G. A., Grigor'yants, V. V., Zhabotinskiy, M. Ye., Klyshko, D. N., Sverdlov, Yu. L. and Sverchkov, Ye. I.

TITLE: Frequency Standard with a Molecular Oscillator (Reper chastoty s molekulyarnym generatorom)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol.3, Nr 4, pp 569-570 (USSR)

ABSTRACT: Description and block diagram are given of a molecular oscillator which was employed for the calibration of quartz crystals operating at a frequency of 1 Mc/s. The frequency of the oscillator was compared with the 23,868th harmonic of the frequency of the investigated crystal and an accuracy better than 10^{-9} was attained. There is 1 figure and 2 references, one of which is Soviet and 1 English.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio Engineering and Electronics of the AS USSR)

SUBMITTED: December 3, 1957

1. Oscillators--Applications 2. Quartz crystals--Calibration

Card 1/1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

06502

SOV/141-58-4-18/26

AUTHORS: Zhabotinskiy, M.Ye., Klyshko, D.N. and Sverchkov, Ye.I.

TITLE: Accurate Comparison of Neighbouring Frequencies by Means of Computing Systems (Tochnoye sravneniye bliskikh chastot pri pomoshchi pereschetnykh skhem)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1958, Nr 4, pp 137-141 (USSR)

ABSTRACT: An equipment is described which permitted the frequency measurement with an error of 10^{-10}, the duration of the measurement being of the order of a few seconds. The equipment is illustrated diagrammatically in Fig 1 on p 139. The measured frequency f and the frequency of a standard oscillator f_1 are shaped into narrow "spiky" pulses by means of two identical circuits; each circuit contains a resistance capacitance amplifier, a pulse forming stage and a wideband pulse amplifier. The two pulse trains obtained in this manner are applied to a mixer-coincidence detector which is normally closed by a negative bias and is opened only when the two pulses coincide. The mixer-detector is terminated with an integrating RC

Card 1/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

06502

SOV/141-58-4-18/26

Accurate Comparison of Neighbouring Frequencies by Means of Computing Systems

circuit which detects the envelope of the pulse beats. The envelope is amplified and limited and afterwards fed to the computing system, type PS-64, which divides the pulse repetition frequency by an even number $n = 2$, 8 or 32; number n can be chosen so as to satisfy the required accuracy of the measurement. The output pulses from the computing system trigger an asymetrical multi-vibrator. The voltage from the cathode of the multi-vibrator is applied to a gate circuit whose amplification is changed thereby stepwise by 30 db. The control grid of the gate tube is supplied with the pulses from an auxiliary oscillator f_o. Consequently the gate circuit transmits pulses of frequency f_o during a period nT. Afterwards the gate is closed for a duration nT. During the latter period the indication of the computer is read out and the computer then reset to zero. The measurement of the frequency f is done in accordance with the formula:

Card 2/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

06502

SOV/141-58-4-18/26

Accurate Comparison of Neighbouring Frequencies by Means of Computing Systems

$$f = f_1 \pm F = f_1 \pm nf_o/m$$

where n is the dividing coefficient of the auxiliary computing system, while m is the reading of the principal computing system. The equipment can be employed at frequencies ranging from 10-3000 kc/s. There is 1 figure and 2 Soviet references.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR (The Institute of Radio Engineering and Electronics of the Academy of Sciences, USSR)

SUBMITTED: 25th November 1957

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N., TUMANOV, V.S.; USHAKOVA, L.A.

Effect of cross-relaxation on population inversion in ruby. Zhur. eksp. i teor. fiz. 43 no.1:25-30 Jl '62. (MIRA 15:9)

1. Moskovskiy gosudarstvennyy universitet.
(Paramagnetic resonance and relaxation)
(Quantum theory) (Rubies)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N.

Second moment of electron paramagentic resonance lines in ruby. Fiz. tver. tela 5 no.10:2825-2828 O '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

VOSKANYAN, A.V.; KLYSHKO, D.N.; TUMANOV, V.S.

Frequency transformations in quantum systems with discrete energy levels. Zhur. eksp. i teor. fiz. 45 no.5:1399-1407 N '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4042560 S/0056/64/046/006/2011/2016

AUTHOR: Kly*shko, D. N.; Yary*gin, V. P.

TITLE: Multiple transitions in the radio frequency range

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 6, 1964, 2011-2016

TOPIC TAGS: stimulated radio frequency emission, induced transition, electron paramagnetic resonance, spin lattice relaxation, stimulated higher harmonic emission, stimulated harmonic

ABSTRACT: The second and third harmonics radiated by a free radical of diphenylpicrylhydrazyl (DPPH), placed in a constant magnetic field and irradiated with a signal of 20 Mc frequency (pumping) were experimentally investigated. The dependences of the polarization and intensity of harmonics on the polarization and intensity of pumping and on the magnitude of the constant magnetic field were obtained. The experimental results were compared with results calculated with the aid of the modified Bloch equation. The good agreement between the experimental and calculated results shows that the nonlinear

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ACCESSION NR: AP4042560

effects at magnetic resonance in substances with dynamic contraction of the resonance width can be calculated with the aid of the Bloch equation. Quantum interpretation of these effects can be graphically illustrated by means of diagrams of the energy versus the angular momentum. This method for indicating resonance by means of harmonics may be very convenient for some radiospectroscopic measurements, for instance, for measuring spin-lattice relaxation time. "The authors are grateful to V. S. Tumanov for valuable discussions." Orig. art. has: 5 figures and 11 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

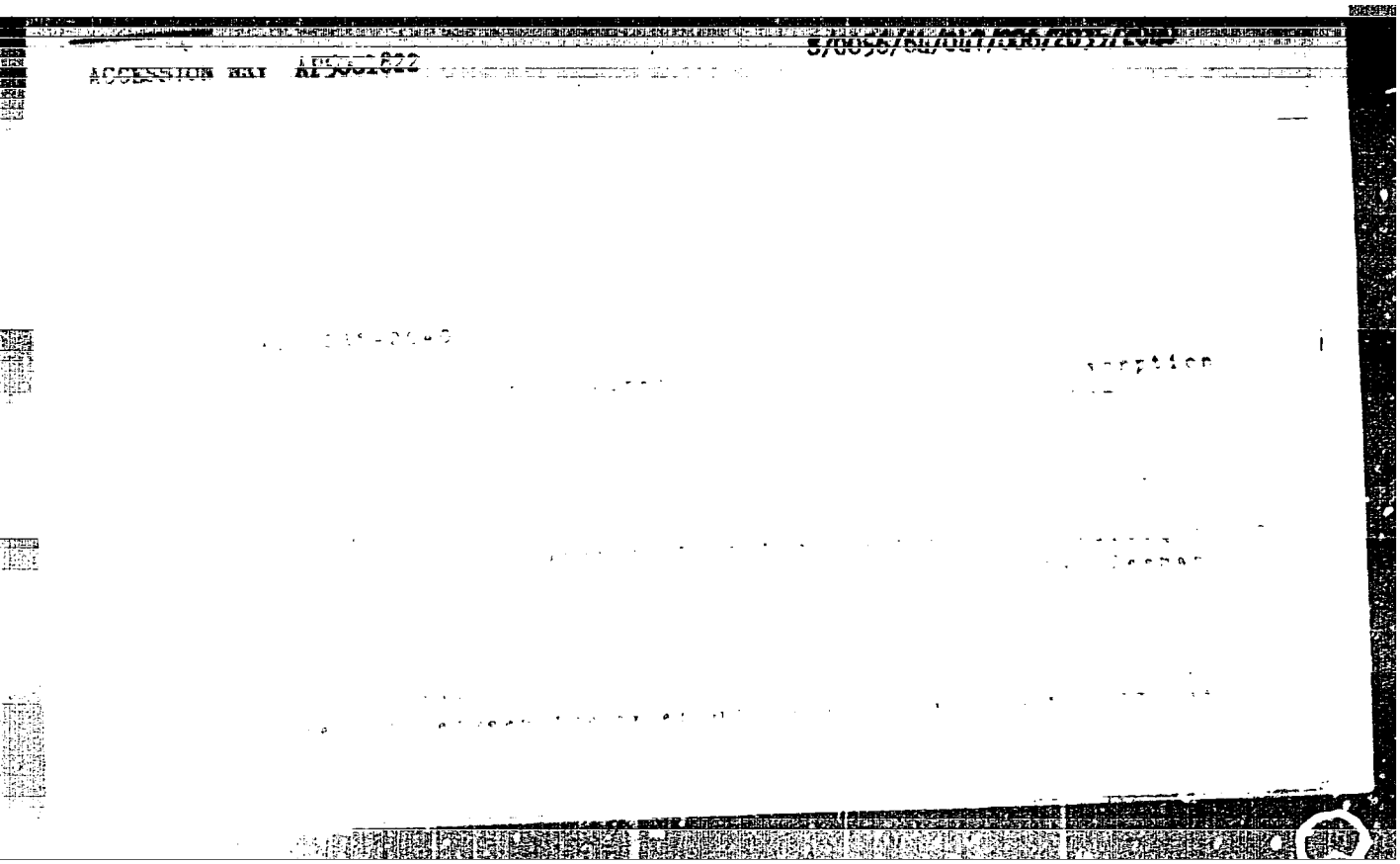
SUBMITTED: 18Jan64 ATD PRESS: 3075 ENCL: 00

SUB CODE: NP, EM NO REF SOV: 002 OTHER: 008

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ENCL: 00 SUB CODE: AP

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 2123-66 EWT(1) IJP(c) WW/DD

ACCESSION NR: AP5025255 UR/0386/65/002/004/0171/0175

AUTHOR: Akhmanov, S. A.; Klyshko, D. N. 44,55

TITLE: Three-photon molecular scattering of light 21,41,55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 4, 1965, 171-175

TOPIC TAGS: Raman scattering, Rayleigh scattering, stimulated emission, nonlinear optics, multiphoton scattering, coherent light

ABSTRACT: The perturbation theory is used in calculating the three-photon Rayleigh and Raman scattering cross sections in gases and liquids. The analysis shows that three-photon scattering cross sections can be associated with two-photon cross sections, experimental data on which are available for many materials. According to numerical calculations, three-photon scattering can be observed in gases and liquids. It is established that three-photon Raman scattering can take place in molecules with a center of inversion. The active vibrations will be the same as those in infrared absorption. Orig. art. has: 2 figures and 3 formulas. [CS]

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosov (Moscow State University)

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 2123-66

ACCESSION NR: AP5025255

SUBMITTED: 17Jun65 ENCL: 00 SUB CODE: OP, EC

NO REF SOV: 000 OTHER: 002 ATD PRESS: 4117

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 1136-66 EWT(1)/

ACCESSION NR: AP5016390 UR/0120/65/000/003/0152/0153
539.283.078

AUTHOR: Klyshko, D. N. 44,55

TITLE: Use of multiquantum transitions in measuring the time of spin-lattice relaxation 21,44,55

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1965, 152-153

TOPIC TAGS: spin lattice relaxation

ABSTRACT: The saturation method used for measuring the spin-lattice-relaxation time T_1 has these two drawbacks: (1) A considerable error due to calibration of the saturating field amplitude H_1 in the specimen and (2) A rapid falling off of the signal-to-noise ratio when H_1 increases due to both decreasing of the signal amplitude and increasing of the spectroscope noise. To eliminate these drawbacks, the article suggests: (a) a method of H_1 calibration based on measuring relative intensities s_1 of the conventional single-quantum and n-quantum absorptions and (b) a method of saturation indication which does not lower signal-to-noise ratio when the specimen saturates. Multi-quantum transitions in a two-level system are used in these methods; the methods were verified by

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 1136-66

ACCESSION NR: AP5016390

measuring T_1 of a free DPPH radical at 33.4 Mc. Orig. art. has: 5 formulas and 1 figure.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 10Sep64 ENCL: 00 SUB CODE: NP

NO REF SOV: 005 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 10951-66 FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(m)-2/EWA(h) SCTB/IJP(c) WW/GG

ACC NR: AP6002286 SOURCE CODE: UR/0188/65/000/006/0043/0048

AUTHOR: Klyshko, D. N.; Penin, A. N.; Polkovinikov, B. F.; Tumanov, V. S.

ORG: Moscow University, Department of Radio Engineering (Moskovskiy universitet, kafedra radiotekhniki)

TITLE: Stimulated Raman scattering in the radio-frequency range

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 6, 1965, 43-48

TOPIC TAGS: Raman scattering, combination scattering, scattering matrix, radio wave scattering, laser, Raman effect, magnetic field, photon, microwave

ABSTRACT: An investigation was made of 1) the stimulated microwave Raman scattering at various orientations of a constant magnetic field H_0 in a plane formed by two mutually perpendicular fields H_1 and H_2, and 2) three-photon absorption when two of the photons have different frequencies. Two methods were used to analyze the two-photon processes: 1) the quasi-classical method, using equations for the density matrix and the nonquantized field, and 2) the probability method. The density matrix method was used to derive a formula for the magnetization vector of a two-level spin system in a strong field oriented perpendicularly to a constant field, and in a weak field oriented parallel to the field. The probability method was used in deriving the formula for the probability of three-photon absorption. The experiments were performed with a free radical of diphenyl-

Card 1/2 UDC: 538.56:530.145

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 10951-66

ACC NR: AP6002286

pycrylhydrazyl in a constant magnetic field H_0. In some of the experiments the pumping frequency $\omega_1/2\pi$ was in the range of 10 Gcps and the signal frequency $\omega_2/2\pi$ was varied from 10 to 20 Mcps. Measurements were obtained both in continuous and pulsed operation modes. In other experiments the pump and signal frequencies were 25 Mcps. The experimental and theoretical data showed that calculations of Raman effects in a two-level system were correct. It was shown that when the ratio of the intensity of stimulated Raman scattering to the general resonance absorption is small, the effect cannot be used for amplification of superhigh-frequency signals. In case of amplification during saturation, this effect can be used for amplification in the cm and especially in the mm ranges. Orig. art. has: 8 formulas and 3 figures. [JA]

SUB CODE: 20, 17/ SUBM DATE: 26Jun64/ ORIG REF: 006/ OTH REF: 015/
ATD PRESS: 4170

Roman Laser 25,44

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 6352-66 EWT(1)/EWA(h)

ACC NR: AP5020363 SOURCE CODE: UR/0141/65/008/003/0513/0521

AUTHOR: Klyshko, D. N.; Konstantinov, Yu. S.; Tumanov, V. S.

ORG: Moscow State University (Moskovskiy gosudarstvennyy universitet)

54
53
B

TITLE: The parametric excitation of a two-level system during saturation

SOURCE: IVUZ. Radiofizika, v. 8, no. 3, 1965, 513-521

TOPIC TAGS: magnetic pumping, electromagnetic pump, electron paramagnetic resonance, parametric resonance

ABSTRACT: The possibilities of parametric amplification of electromagnetic oscillations when a substance with a narrow absorption line is illuminated by an auxiliary monochromatic signal (pumping signal) are analyzed. It is assumed that the active substance is inside the resonator and that the resonator has two noninteracting types of oscillations with natural frequencies close to the pumping frequencies. An expression is obtained for the magnetization (or polarization in the case of electric dipole interaction) of a two-level system in the presence of an intense pumping field with a frequency ω_1 and two weak fields with frequencies ω_2 and

Card 1/2 UDC: 539.28

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 11123-66 EWT(1)/EWP(e)/EWT(m)/EWA(h) WH

ACC NR: AP6002710 SOURCE CODE: UR/0056/65/049/006/1723/1727

AUTHOR: Klyshko, D. N.; Penin, A. N.; Tumanov, V. S.

ORG: none

39

B

TITLE: Frequency subtraction by means of a three-level system

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 6, 1965, 1723-1727

TOPIC TAGS: nonlinear optics, multiphoton process, three level system, harmonic generation, frequency subtraction, frequency fixer, ruby single crystal, maser

ABSTRACT: Resonance subtraction of two MW frequencies ($\lambda \sim 3$ cm) by means of a three-level quantum system was investigated theoretically using graphical methods, and experimentally using ground-state spin levels of a ruby single crystal. The experiment was carried out on a ruby single crystal with a volume of 0.15 cm^3 and a 0.02% concentration of chromium ions. The three lower Zeeman levels were used. To permit all transitions, a constant magnetic field (H = 625 oe) perpendicular to the crystal axis was used. The cylindrical ruby crystal was placed in a rectangular cavity where it was pumped by the H_{011} and H_{101} modes with frequencies corresponding to 10.22 and 10.15 Gcps, respectively. A coil with Q = 20 was wound around the specimen and tuned at 70 Mcs to the resonant amplifier. The maximum output power at the resultant (difference) frequency P_3 was of the order of $2 \cdot 10^{-14}$ w, while the

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 11123-66

ACC NR: AP6002710

power of the heterodyne signal was of the order of 50 Mw. The dependence of P_3 on the angle between the field and the crystal axis was also investigated. The experimental results confirmed the basic theoretical predictions and indicated the possibility of producing resonant mixers based on quantum systems with three discrete energy levels which would convert SHF signals into IF signals. Such signal conversion can be enhanced considerably by suitable selection of the optimal quantum system (solid-state and/or gaseous), cooling the working medium, and incorporating resonant networks with higher Q's. Orig. art. has: 3 formulas and 3 figures. [YK]

SUB CODE: 20/ SUBM DATE: 05Jul65/ ORIG REF: 004/ OTH REF: 003/ ATD PRESS: 4176

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N.

Heterodyning by means of a two-level quantum system.
Radiotekh. i elektron. 10 no.12:2243-2244 D '65.
(MIRA 19:1)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta, kafedra radiotekhniki.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N.; TUMANOV, V.S.; YARYGIN, V.P.

Subtraction of the frequency in a two-level system. Vest. Mosk.un. Ser. 3: Fiz., astron. 20 no.4:89-90 Jl-Ag '65.

(MIRA 18:12)

1. Kafedra radiotekhniki Moskovskogo gosudarstvennogo universiteta. Submitted February 1, 1965.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N.; PENIN, A.N.; POLKOVNIKOV, B.F.; TUMANOV, V.S.

Induced Raman scattering in the microwave region. Vest. Mosk. un. Ser. 3: Fiz., astron. 20 no.6:43-48 N-D '65.

(MIRA 19:1)

1. Kafedra radiotekhniki Moskovskogo universiteta. Submitted June 26, 1964.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSHKO, D.N.; PENIN, A.N.; TUMANOV, V.S.

Frequency subtraction by means of a three-level system.
Zhur.eksp. i teor.fiz. 49 no.6:1723-1727 D '65.
(MIRA 19:1)

1. Submitted July 5, 1965.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 26131-66 EWT(1)/EWP(e)/EWT(m) IJP(c) GG/WH

ACC NR: AP6015799 SOURCE CODE: UR/0386/66/003/010/0385/0389

AUTHOR: Dneprovskiy, V. S.; Klyshko, D. N.; Penin, A. N.

ORG: Physics Department of the Moscow State University im. M. V. Lomonosov (Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Photoconductivity of dielectrics under the influence of laser radiation

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 10, 1966, 385-389

TOPIC TAGS: photoconductivity, laser emission, ruby laser, sodium chloride, aluminum oxide, photon

ABSTRACT: The authors present preliminary results of experiments aimed at observing the photoconductivity induced in uncolored NaCl and Al_2O_3 single crystals by radiation from a ruby laser. The investigated sample was placed in a parallel-plate capacitor charged to a voltage $E_0 \sim 1$ kv. The laser flash induced in the capacitor a charge which was observed on an oscilloscope. To increase the radiation density (by a factor of ~5) and to reduce the beam dimensions, a cylindrical telescopic system was used. To avoid effects connected with the space charges, the voltage was applied to the capacitor only just before the flash; the capacitor was short-circuited during the intervals between the flashes. The logarithmic plots of maximum charge (Q) vs. radiation density (S) turned out to be essentially straight lines (corresponding to $Q \sim S^n$) with slopes $n = 4.9 \pm 0.4$ for NaCl and $n = 3 \pm 0.3$ for Al_2O_3. The

Card 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 26131-66

ACC NR: AP6015799

2

charge growth time was ~0.2 msec in both cases, this being apparently due to the presence of shallow traps. The authors attribute the observed effect to many-photon excitation of the electrons in the conduction band. The experimental values of S can be reconciled with theoretical estimates of the probability of n-photon absorption if the radiation energy averaged over the beam cross section is $S \approx 100$ Mw/cm^2 for NaCl and $S \approx 20$ Mw/cm^2 for Al_2O_3. It is pointed out in the conclusion that the observation of many-photon absorption in laser media is of interest for the study of the mechanism whereby they become damaged at large generation levels, and for the determination of the limiting laser power. The experiments also yield an estimate of the limiting radiation density S_{max} at which the gain in ruby is offset by three-photon absorption. This is found to be $S_{max} = 3 \times 10^9$ w/cm^2, which is two orders of magnitude smaller than the value of S_{max} calculated by F. V. Bunkin and A. M. Prokhorov (ZhETF v. 48, 1084, 1965). The authors thank S. A. Akhmanov and R. V. Khokhlov for valuable advice and discussion. Orig. art. has: 1 figure and 2 formulas.

SUB CODE: 20/ SUBM DATE: 01Mar66/ ORIG REF: 002/ OTH REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

L 30239-66

ACC NR: AP6020163 SOURCE CODE: UR/0188/65/000/004/0089/0090

AUTHOR: Klyshko, D. N.; Tumanov, V. S.; Yarygin, V. P.

ORG: Department of Radio Engineering, Moscow State University (Kafedra radiotekhniki Moskovskogo gosudarstvennogo universiteta)

35
B

TITLE: Heterodyning by means of a two-level system

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 4, 1965, 89-90

TOPIC TAGS: matrix element, Zeeman effect, magnetization, ferrite

ABSTRACT: It is shown that heterodyning can be accomplished by utilizing the nonlinear properties of a two-level system with diagonal matrix elements of the dipole moment $\vec{\mu}$. This is exemplified by observations of this effect at radio frequencies with the aid of Zeeman levels of the free radical diphenylpicrylhydrazyl (DPH). The effect is readily calculated on the basis of the equations of a density matrix with phenomenological relaxation times T_1 and T_2 for the case of a system with Bohr frequency ω_0 which is acted upon by two monochromatic fields. Proceeding from the appropriate formula, the authors derive the expression for the Fourier component of magnetization (or polarization) of the system at the difference frequency $\omega_1 \sim \omega_0$ and, thence the equation for a "magnetic" two-level system with $T_1 = T_2$. This was experimentally

Card 1/2 UDC: 621.372.061.3

L 30239-66

ACC NR: AP6020163

0

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

verified by placing several grams of polycrystalline DPH in a system of three inductance coils with mutually perpendicular axes and supplying voltages of different frequencies, $\omega_1/2\pi$ =25 mc and $\omega_2/2\pi$ =22 mc, to two fo the coils; the axis of the third coil, tuned to 3 mc, is positioned parallel to $\vec{H}_0$ (intensity of constant magnetic field), and the amplified difference-frequency signal induced in this coil is observed on an oscillograph screen. The experimental findings were found to be in agreement with the calculations. It is further pointed out that the effect examined above has nothing in common with the frequency-conversion effect in ferrites; it is significant, however, that in the case of the two-level system the conversion coefficient may be increased, owing to the parametric regeneration of the system at the signal frequency observed during its partial saturation by a field with the frequency ω_1. Orig. art. has: 1 figure and 2 formulas. [JPRS]

SUB CODE: 20 / SUBM DATE: 01Feb65 / ORIG REF: 002 / OTH REF: 004

Card 2/2

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

PILETSKIY, V.A.; SOLOVNYCHIK, M.Z.; KAMINSKIY, Yu.K.; LUTSENKO, I.G.; VABADZHANOVA, V.I.; KLYSHNIKOV, F.L.; FRIDMAN, M.I.; KHITROV, P.A., tekhn.red.

[Traveler's guidebook] Spravochnik passashira. Moskva, Gos. transp.zhel-dor.izd-vo, 1959. 289 p. (MIRA 12:11)
(Guidebooks) (Transportation)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

PILETSKIY, V.A.; SOLOVEYCHIK, M.A.; ~~KLYCHNIKOV, P.L.;~~ BABADZHANOVA, V.I.; LUTSENKO, I.G.; KAMINSKIY, Yu.K.; FRIDMAN, M.I.; KARPOVA, N.L., red.; BOBROVA, Ye.N., tekhn. red.

[Passenger's handbook] Spravochnik passazhira. Moskva, Transzheldorizdat, 1962. 367 p. (MIRA 15:6)
(Transportation—Timetables)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

PILETSKIY, V.A.; SOLOVEYCHIK, M.Z.; KLYSHNIKOV, F.L.; BABADZHANOVA, V.I.; LUTSENKO, I.G.; KAMINSKIY, Yu.K.; KARPOVA, N.L., red.; KHITROV, P.A., tekhn. red.

[Passenger's manual] Spravochnik passashira. Moskva, Transzheldorizdat, 1963. 334 p. (MIRA 16:6)
(Transportation--Timetables)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

BABADZHANOVA, Vera Ivanovna; KAMINSKIY, Yuriy Konstantinovich; KLYSHNIKOV, Feder Leont'yevich; LUTSENKO, Illarion Grigor'yevich; PILETSKIY, Valerian Aleksandrovich; SOLOVEYCHIK, Mikhail Zakharovich; KOLTUNOVA, M.P., red.

[Passenger's manual] Spravochnik passazhira. Moskva, Transport, 1965. 375 p. (MIRA 18:8)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSZEJKO, Czesław

Use of Hispamol in labor. Ginek. [illegible]

1. Z II Kliniki Położnictwa i Chorób Kobiecych Akademii Medycznej w Gdańsku (Kierownik: prof. dr. med. W. [illegible]).

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ZWIERZ, Czesław; HLYSZENKO, Czesław

Attempts at finding Trichomas vaginalis in internal genitals of women. (A preliminary note). Bull. Inst. Mar. Med. Gdansk 15 no.3:147-48 '64

1. From the Institute of Marine Medicine in Gdansk and from II Clinic of Obstetrics and Gynaecology, Medical in Gdansk.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSZEJKO, Czesław

Studies on the use of sestron in obstetrics. Ginek. pol. 34 no.3:371-376 '63.

1. Z II Kliniki Położnictwa i Chorób Kobiecych AM w Gdańsku Kierownik: prof. dr med. W. Gromadski.
(PHENYLETHYLAMINES) (MUSCLE RELAXANTS)
(LABOR)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

POLAND

KLYSZEJKO, Czesław, LAKOMY, Tadeusz, and PAPIEROWSKI, Zbigniew, Second Clinic of Obstetrics and Gynecology (II Klinika Położnictwa i Chorob Kobiecych), AM [Akademia Medyczna, Medical Academy] in Gdansk (Director: Prof. Dr. med. Wojciech GROMADZKI)

"Effect of Trichloroethylene During Labor in Women as Compared to In vitro Results."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 36, 2 Sep 63, pp 1333-1338

Abstract: [Authors' English summary modified] Authors studied, by means of "Lorand" tocograph, the effect of trichloroethylene (Polfa)(using "Emotril" inhalator) on the uterus in 60 deliveries. About 50% showed shortening of first period of labor due to contractive action of drug, while about 30% showed effects of its spasmolytic action. In vitro study of sections taken at Caesarian sections with photoelectric LT-type recorder showed that small amounts of drug stimulated, and larger amounts inhibited the contraction of uterine tissue. 10 refs: 4 each Polish and Western, 2 German.
1/1

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

DMOCHOWSKI, Antoni; KHOUVINE, Yvonne, prof.; KLYSZEJKO, Leokadia

Isolation and general chemical analysis of desoxyribonucleoproteides of the bovine pancreas. Nauki matem przyrod Lodz no.10:11-19 '61.

1. Department of Biochemistry, University, Lodz, and Laboratory of Biochemistry of Nucleoproteides, Institute of Physicochemical Biology, Paris.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSZEJKO, Leokadia

Nucleic acids in bacteria. Postepy biochem. 2 no.2:243-265 1956.

1. Zaklad Biochemii Uniwersytetu Lodzkiego.
(NUCLEIC ACIDS, metabolism,
bact., review (Pol))
(BACTERIA, metabolism,
nucleic acids, review (Pol))

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

DMOCHOWSKI, A.; [redacted]

Phosphorus fractions of psoriatic scales (psoriasis vulgaris). Acta biochim. polon. 4 no.2:73-83 1957.

1. Z Zakladu Biochemii Uniwersytetu Lodzkiego Kierownik: prof. dr A. Dmochowski.

(PSORIASIS, metab.
phosphorus cpds. in psoriatic scales, fractionation (Pol))
(PHOSPHORUS, determ.
in psoriatic scales, fractionation of phosphorus cpds. (Pol))

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSZEJKO, L.

POLAND / Analytic Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60631.

Author : Leokadia Klyszejko, Tadeusz Krajewski.
Inst : Lodz University.
Title : Rapid Method of Phosphorus Determination in Dry Substance.

Orig Pub: Zesz. nauk. Uniw. lodzk., 1957, Ser. 2, No 3, 105-113.

Abstract: 5 to 40 mg of the substance to be analyzed is heated in a Pt crucible with a 6-fold amount of mixed Na_2CO_3 (8 parts) and KNO_3 (3 parts) first 15 min. on a very small flame, and after that 2 min. on a great flame. The melt is dissolved in hot water, the solution is cooled and diluted with water to a certain volume. An aliquot part of the

Card 1/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

IMOCHOWSKI, Antoni; KLYSZEJKO, Leokadia; KUBICKA, Liliana

Preliminary electrophoretic analysis of ox pancreas histones on starch gel. Nauki matem przyrod Lodz no.13:31-36 '62.

1. Katedra Biochemii, Uniwersytet, Lodz.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYSZEWSKA, Marta, mgr inż.

Construction physics; thermal and humidity problems; review of periodicals. Inst tech bud biul inf no.17:58-63 '64.

1. Technical and Economic Information Center of the Institute of Civil Engineering, Warsaw.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYUBINA, T.S.

Effect of the act of eating and of natural conditioned food stimuli on the motor activity of the small intestine in small ruminants (sheep, goats). Fiziol. zhur. [Ukr.] 11 no.1:80-87 Ja-F '65. (MIRA 18:7)

1. Umanskiy pedagogicheskiy institut.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYUCHANSKAYA, Ye. N.

Improving the quality of pale contours in preparing background printed forms. Geod. i kart. no.5:54-57 My '57. (MLRA 10:8)
(Map printing)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KL44C 44745 KA44 C 4

3(8), 3(4) SOV/6-59-7-4/29

AUTHOR: Sokolova, G. I.

TITLE: Results of the Competition for the Best Improving Suggestion (Itogi konkursa na lushchoye rationalizatorskoye predlozheniye)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 7, pp 77-81 (USSR)

ABSTRACT: In May 1959, the ordinary competition for the best improving suggestion in the field of topographic-geodetic and cartographic production was concluded at the Glavnoye upravleniye geodezii i kartografii MVD SSSR (Main Administration of Geodesy and Cartography of the Ministry of Internal Affairs of the USSR). 7 cartogeodetic services, 8 cartographic institutes and NIIGAiK took part. A total of 30 topographic-geodetic, and 31 cartographic, suggestions were submitted. The 1st prize of 1,000 rubles was awarded to V. A. Nazarov and V. V. Bronov (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant) for the "Seamless Fastening of Atlas Sheets". The 2nd prize of 750 rubles were awarded to: 1) [illegible] Bentalovskiy, V. N. Varnagin, Ye. S. Golitsyn, G. P. Skoblar and V. P. Shepunov (NIIGAiK) for "Technology of the Use of Standard Boxes (Ukryvaya Shkovs)". 2) L. V. Sarzhin, V. N. Varnagin, E. G. Bobrell'shaya, G. N. Skoblar, L. L. Ivashkina for "Technology of the Manufacture of Combined Stereotypes" (NIIGAiK). 3) S. A. Lapin (Rostovskaya AGP (Rostov AGP)) for "Reduction of Work in Evaluating the Accuracy of Symmetric Geodetic Nets Formed by Figures of Regular Shape". 4) N. P. Sergeyev (Sverdlovskaya AGP (Sverdlovsk AGP)) for "Light Collapsible Ladder of Wood for Prospecting". - The 3rd prize of 500 rubles each were awarded to: 1) A. P. Shemelin (Zabaykalskaya AGP (Zabaykal AGP)) for "Establishment of Fixed Points by the Method of Thawing by Means of Vapor". 2) L. A. Gl'ebovskiy (Zabaykalskaya AGP (Zabaykal AGP)) for "Construction of An Overhead Trolley for Timber Transport". 3) L. A. Kyrin (Rostovskaya AGP (Rostov AGP)) for "Variation in the Arrangement of Photographs on the SKB-2". 4) V. P. Zorkin (Rostovskaya AGP (Rostov AGP)) for "Raising of Geodetic Signs by 3-7 Meters". 5) B. I. Ershov, I. V. Sarzhin, I. I. Aleksandrova, I. N. Varnagin, I. I. Kizilov and [illegible] Kislyakov (NIIGAiK) for "Technology of the Completion and Edition of Topographic Maps by the Photorelief Method". 6) N. P. Glushenin (Minskaya kartograficheskaya fabrika (Minsk Cartographic Institute)) for "Vertical Filing Machine for Brochures". 7) A. A. Tsaliev (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)) for "Mechanism for the Loading of Trucks With Paper Rolls". 8) A. P. Tsaplenko (Kharkovskaya AGP (Kharkov AGP)) for "Replacement of the Arc Lamp for the Heliographic-printing Machine ER-1 by an Illuminating Device With Luminescent Lamps ER-40". 9) S. K. Grigor'yev (Sverdlovskaya AGP (Sverdlovsk AGP)) for "Rules for Manual in the Preparation of Map Compilations and Final Compilations". 10) L. G. Ivrailov (Severo-Zapadnaya AGP (North-west AGP)) for "Improvement of the Contact Mechanism in the Micrometer by Nedar". 11) K. K. Andreyev (Rostovskaya AGP (Rostov AGP)) for "Formulas and Tables for a More Rational Computation of Superelevations From the Trigonometric Leveling". 12) S. G. Il'yev (Sverdlovskaya AGP (Sverdlovsk AGP)) for "Numbering and Painting of Leveling Staffs". 13) S. N. Smirnov (Rostovskaya AGP (Rostov AGP)) for "Formulas and Table for Extreme Divergences Between the Free Terms of Polar and Base Conditions Computed on a Plane and on a Ball". - Besides, the following suggestions were approved by the jury: 1) L. V. Yerkov (Sverdlovskaya AGP (Sverdlovsk AGP)), "Underframe for Observations From the Telescopic Tower". 2) P. V. Sainskiy

Card 1/6

Card 2/6

Card 3/6

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

SOV/6-57-7-4/25

Results of the Competition for the Best Improving Suggestion

(Severo-Zapadnaya AGP (North-east AGP)) [illegible] for Determining the Corrections of Centering and Reducing With an Auxiliary Scale Corrections of the Curvature of the Image for Determining the Corrections of the Curvature of the Image of the Geodetic Line and of the Spheric Excess". 3) V. G. [illegible] (Moskovskaya AGP (Moscow AGP)). "Variation of the Construction of the Heliotrope". 4) G. [illegible] Shleifendorf (Moskovskaya AGP (Moscow AGP)). "Zero THEODOLITE for the Gravimeters of the GAL-KI-type". 5) P. I. Popov (Moskovskaya AGP (Moscow AGP)). "Device for Cutting Aluminum". 6) A. I. Fikman and E. M. Grinberg (Moskovskaya AGP (Moscow AGP)). "Sharpening Knot". 7) Ya. I. Rapoportskiy, E. A. Pashkevich and K. F. Blashenin (Minskaya kartograficheskaya fabrika (Minsk Cartographic Institute)). "A Mechanic Device for Fixing Offset Colors". 8) L. L. Gitelberg (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)). "Device for Grinding the Edges of Plate Glass". 9) A. A. Tuzov (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)). a) "Mechanism for Inclining the Grinding Case". b) "Mechanism for Lifting the Trough With the Balls". 10) V. I. Pershakov and S. A. Lozebnyy (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Institute)). "Automatic Switch-off of Are Lamps". 11) I. V. Vasil'yev (Tashkentskaya kartograficheskaya fabrika (Tashkent Cartographic Plant)). "Increase in the Durability of Light-sensitive Rubber Solution (Adhesive)". 12) V. N. Shar (Kiyevskaya kartograficheskaya fabrika (Kiyev Cartographic Plant)). "Correspondence of the Stroke-scale marks on Topographic Maps With the Letters on the Machine Printing Frame". 13) V. V. Bogutkov, S. P. Fahmain (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant)). "On the Improvement in the Construction of Mechanisms for Pressing-on the Inking Rollers and Printing Frame on the Offset Machines 'Planeta-Super-Svista'". 14) A. Ya. [illegible] (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant)). "A Rational Method of Making Positives of Printing Frames of Relief Printing on Tracing Paper for Printing Maps on Offset Machines". 15) G. M. Lashmanskiy (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant)). "Synchronization and Automatization of the Switching on and off of Arc Lamps and of the Suction Fan in the Copying Department". 16) V. P. Alamanyan (Minskaya kartograficheskaya fabrika (Minsk Cartographic Plant)). "Variation in the Technology of Making Sets of Outline Maps of the Fifth Class". 17) V. V. Il'yashin (Minskaya kartograficheskaya fabrika (Minsk Kartograficheskaya Plant)). "Preparation of Collecting-and Corresponding Positives by the Method of the Washed-out Relief on 'vinipres'". 18) V. M. Dobrynkin (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant)). "Switching off the Motor of the Compressor on the Copying Frame by Means of the Change Lever for Lifting the Glass and by Means of the Vacuum". 19) S. I. Mathaus (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant)). "Device for Laying on the Sensitive in Copying". 20) F. M. Barkin (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant)). "Device for Drying Paper on Offset Machines". 21) S. M. Kuznetsova (Tbilisskaya kartograficheskaya fabrika (Tbilisi Cartographic Plant)). "Progressive Method and Procedure for the Preparatory Work in Calculating and Plotting the Geographic Network on Maps to Be Compiled". 22) S. I. Kirsanov (MRSPh) "A Mechanism for Repairing the Guides of the Offset Machine". 23) Ya. F. Turusov (MRSPh) "Device for Regulating the 'Color' of the Offset Machine". 24) Ya. I. Kiyashchenko and E. V. Pashkova (MRSPh) "Improving the Method of Precipitating the Silver Nitrate in Used Solutions".

Card 4/6

Card 5/6

Card 6/6

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

S/035/62/000/006/049/064
A001/A101

AUTHORS: Zhudro, A. N., Klyuchanskaya, Ye. N., Edel'shteyn, D. V.

TITLE: Practice of using plastic materials in compiling, shaping and manufacturing printed forms for publishing maps

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 6, 1962, 24, abstract 60153 ("Sb. statey po kartogr.", 1961, no. 13, 47 - 68)

TEXT: The use of plastic materials in NRKCh made it possible to simplify the technological process of producing author's and publisher's originals and manufacturing printed forms at the expense of reducing photographic processes and eliminating the differentiating retouching. It is noted that the plastic "khostafan" is characterized by practically absent deformation, resistance to fractures and cracks. Practice of using "khostafan" in 1961 is described in detail. A special glue (natural rubber - 20 g, aviation gasoline - 600-700 ml, colophony - 65 g) is successfully used when conducting assembly work on the surface of "khostafan". Publisher's drawing of all elements on "khostafan" is performed with conventional drawing tools on such a number of originals which corresponds to the numbers of colors on the map being published; photo paper

Card 1/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

with a removable layer is used for shaping signatures. Working positives are manufactured from the finished originals by the method of coloring in bulk on celluloid base (collodion solution is applied to "khostafan" on the gloss side; printed forms are copied from the positives. The content of a map is checked on the superposed imprint. Shaping of publisher's originals of a fine drawing is performed by the method of engraving on the layer prepared according to the prescription elaborated at ЦНИИГАиК (TsNIIGAiK): dry roller paste СВП (SVP) on titanium white - 300 g, colophony - 126 g, "alloy" (100 g vaseline oil and 25 g colophony) - 54 g, dibutyl phthalate - 6-10 ml; rectified alcohol - 1,000 ml; butyl acetate - 660 ml. Special engraving instruments are used. Contour copies are made by the method of washed-off relief with coloring by blue dyestuff. A table is presented on the results of checking on how uniformly various copying and other solutions are distributed on the dull and gloss sides of "khostafan", and how stable they are retained. Work is continuing on checking the use of "khostafan" instead of glass for manufacturing bromium-silver negatives and diapositives; the work of an experimental laboratory is described which manufactures silver-free copies on "khostafan" by the washed-off relief and refines the technique of manufacturing duplicates. To manufacture copies on "khostafan" by

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

S/035/62/000/006/049/064
A001/A101

Practice of using...

the coloring method, it is necessary to apply preliminarily 2% collodion on its gloss side, and after its drying to apply chrome solution of the Siberian larch gum. Coloring of nitrofilms is performed with a dyestuff according to the prescription: solution A - dyestuff induline - 48 g, rectified ethyl alcohol - 800 ml, solution (B) - brown fatty dyestuff - 24 g, butyl acetate - 80 ml. To clear up the feasibility of copying from "khostafan" in direct and reverse images, two printed forms were manufactured: On one of them, the positive was placed during copying with emulsion layer toward the copying layer, on the other, by the layer upward; no visual difference in printed imprints from these forms was noticed.

I. Mityachkin

[Abstracter's note: Complete translation]

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

ZHUDRO, A.N.; KLYUCHANSKAYA, Ye.N.; KDEL'SHTEYN, D.V.

Using plastic materials in compiling, delineating and plate making in map printing. Sbor.st.po kart. no.13:47-68 '61. (MIRA 15:5)
(Map printing)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYUCHANSKIY, O.O.

Methods of sampling ores and minerals of nonferrous metals for trace elements. Razved.i okh.nedr 28 no.1:11-16 Ja '62. (MIRA 15:3)

1. TSentralizovannaya poiskovo-revizionnaya ekspeditsiya Geologorazvedochnogo tresta No.1.
(Trace elements) (Sampling)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

KLYUCHANSKIY, Georgiy Georgiyevich

[Characteristics of the commercial estimation of the resources of trace elements in nonferrous metal deposits] Osobennosti promyshlennoi otsenki zapasov rasseiannykh elementov mestorozhdenii tsvetnykh metallov. Moskva, Izd-vo "Nedra," 1964. 52 p. (MIRA 17:5)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1

Feb ... /0027/0028

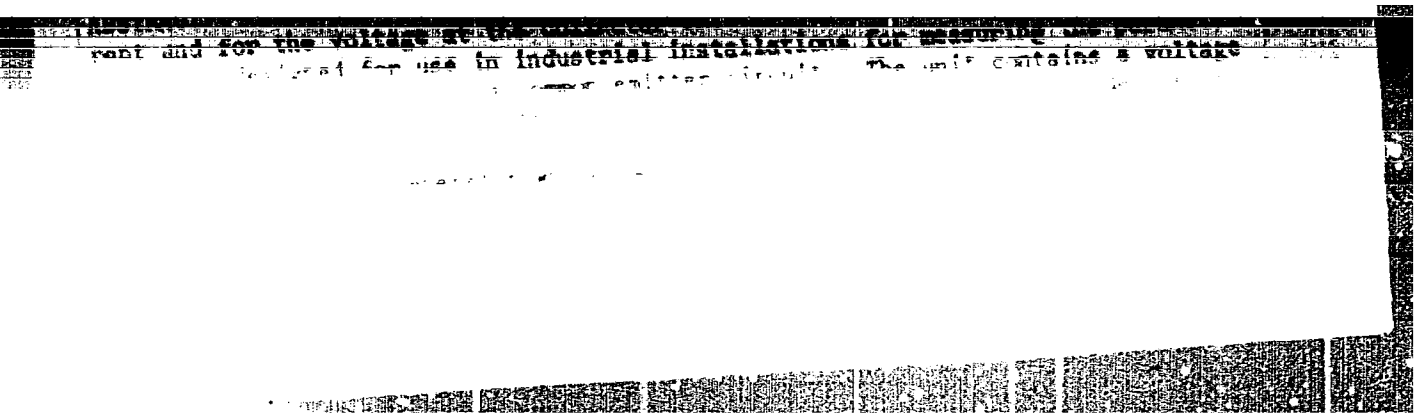
TOPIC TAGS: voltage regulator, junction trans...

25

... certificate introduces a regulator for the collector cur-

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723310004-1"