"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, V. A. 168T10

USSR/Electricity - Network, 4-Terminal Transfer Coefficient Jun 50

"Applying Methods of Synthesis of Electrical Circuits to the Construction of a Four-Terminal Network According to the Transfer Coefficient Given on a Finite Frequency Interval," V. A. Taft, Power Eng Inst imeni Krzhizhanovskiy, Acad Sci USSR

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 6, pp 873-887

Discusses problem of applying methods of synthesis to constructing circuit possessing given transfer coefficient. Considers main expressions characterizing operating regimes of 4-terminal circuit. Submitted 19 Jan 50 by Acad A. V. Vinter.

[redacted] 168T10

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Telecommunication
Circuits, Networks

SA
Sect. B

621.392.5.

2228. Quadripoles with Chebyshev parameters for correction of amplitude-frequency characteristics
V. A. Tarr. *Dokl. Akad. Nauk. SSSR*, **81**, 577-80 (No. 4, 1951) *In Russian.*

Correction of amplitude over a finite frequency band without affecting it outside the band, can be achieved by the use of quadripole equalizers of RL and RC elements. The concise mathematical solution of the Zolotarev problem is achieved with the help of Chebyshev functions. A graphical interpretation of the problem at the border frequency, where the logarithmic decrement falls suddenly to zero, is shown and discussed, and the extension of the method to any desired frequency interval by means of frequency transformation is demonstrated.

A. LANDMAN

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, V.A.

Quadripoles with Chebyshev properties of amplitude and phase frequency characteristics. Taft. Trudy Sem.po toch.mash. no.5:22-53 '52. (MLRA 6:6)
(Transducers)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

USSR/Electricity - Power Systems Aug 52
Calculating Procedures

"Engineering Methods for Calculating Transient Operating Conditions in Complex Electric Power Systems," Prof E. A. Meyerovich, Dr Tech Sci, V. A. Taft, Cand Tech Sci, Power Eng Inst imeni Krzhizhanovskiy, Acad Sci USSR

"Elektrichestvo" No 8, pp 31-38

235T41

Analysis of transient operating conditions in systems contg transmission lines and salient-pole machines requires soln of complex systems of differential eqs with const coeffs and variable coeffs, and partial differential eqs.

Author's new procedure of analytical soln is simple and rapid, using network analyzers. Devices based on this procedure have advantages over electrointegrators and arithomometer-type machines, can be used to calc transient processes. Submitted 25 Aug 51.

235T41

TAFT, V. A.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

USSR/Electricity - Resistance Matrices 21 May 52

"Necessary and Sufficient Conditions Governing the Physical Realization of a 2m-Rank Matrix of Total Resistance in the Form of a Passive Multi-Terminal Network," V. A. Taft

"Dok Ak Nauk SSSR" Vol LXXXIV, No 3, pp 499-501

Discusses the problem concerning the sufficiency of the condition of positiveness (semipositiveness) and realness of the total-resistance matrix (conductance), which reduces to demonstrating a general method for the phys realization of a pos real matrix. States 3 relevant theorems and sequence of

225T32

operational procedure. Concludes that conditions of positiveness of a total-resistance matrix (conductance) is not only necessary but also sufficient for the phys realization of multipoles. Submitted by Acad A. V. Vinter 24 Oct 52.

225T32

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, V.A.; KOVALENKOV, V.I., redaktor; YAKOVKIN, M.V., redaktor; ASTAF'IEVA, G.A., tekhnicheskiy redaktor.

[Principles of calculating linear electric circuits according to their frequency ratings] Osnovy metodiki rascheta lineinykh elektricheskikh tsepei po zadannym ikh chastotnym kharakteristikam. Moskva, Izd-vo Akademii nauk SSSR, 1954. 234 p. (MLRA 8:1)

1. Chlen-korrespondent AN SSSR (for Kovalenkov)
(Electric circuits)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Taft, V.A.

KRON, G.; LIBKIND, M.S., kandidat tekhnicheskikh nauk [translator]; TAFT, V.A., kandidat tekhnicheskikh nauk [translator]; ANTIK, I.V., redaktor; MEYEROVICH, E.A., professor, doktor tekhnicheskikh nauk, redaktor; FRIDKIN, L.M., tekhnicheskiy redaktor.

[Application of tensor analysis to electric engineering] Translated from the English. Primenenie tenzornogo analiza v elektrotekhnike. Perevod s angliiskogo M.S.Libkinda, V.A.Tafta. Pod red. i s prilqzheniem E.A.Meerovicha.Moskva, Gos.energ.izd-vo, 1955. 274 p.
(Calculus of tensors) (Electric engineering) (MIRA 9:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

PHASE I BOOK EXPLOITATION 791

Taft, Viktor Aleksandrovich

Elektricheskiye tsepi s periodicheski izmenyayushchimisya parametrami i perekhodnyye protsessy v sinkhronnykh mashinakh (Electric Circuits With Periodically Changing Parameters and Transients in Synchronous Machines) Moscow, Izd-vo AN SSSR, 1958. 187p. 6,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Energeticheskiy institut.

Resp. Ed.: Zubkov, P. I.; Ed. of Publishing House: Filaretova, A.S.; Tech. Ed.: Kashina, P. S.

PURPOSE: This book has both a theoretical practical value for scientists, engineers and technicians working in the fields of electrical engineering, electric machines and the design and calculation of complex electric power systems.

COVERAGE: The book elucidates problems of the theory of electric circuits with periodically changing parameters and the use of

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

frequency methods for studying transient and steady-state conditions in such circuits. A synchronous machine theory based on frequency methods is discussed and is extended to a general case of unsymmetrical conditions. According to the author, the problem of investigating transients in synchronous machines under asymmetrical conditions remains largely unsolved. The author quotes professor A. A. Gorev, who in a recently published monograph on transients in synchronous machines wrote that in the case of unsymmetrical conditions, equations, which in the general case contained periodic coefficients, become irreducible and their solution complicated to the extent that they have no practical application. The author applies frequency methods based on a Fourier expansion and presents general methods of investigation. These methods are, according to the author, directly applicable to the study of symmetrical as well as unsymmetrical conditions of synchronous machine operation. Practical application of these methods is based on the use of an a-c calculating board and the method of symmetrical components, and does not necessitate the introduction of any methods not common to everyday electrical engineering practice. The monograph also examines problems connected with the physical nature of resonance phenomena under parametrical resonant conditions. This examination makes it possible to define more accurately some

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problems of complex conditions of electric machines. (See articles in the periodical ELEKTRICHESTVO and the paper of M. Marinescu and M. Popov "Novyy metod analiza parametricheskikh yavleniy") (A New Method of Analyzing Parametrical Phenomena). The author describes briefly the contributions to the field by the following writers. I. S. Bruk, P. M. Kantor, E. A. Meyerovich, D. A. Gorodskoy, N. N. Shchedrin, V. A. Taft, V. A. Venikov, I. M. Markovich, V. S. Gorchakov, P. S. Zhdanov. There are 79 references, of which 69 are Soviet and 10 English.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

DAVYDOV, Grigoriy Borisovich; TAFT, V.A., otv.red.; SHORIN, N.A., red.; KARABILOVA, S.F., tekhn.red.

[Fundamentals of the theory and analysis of phase-correcting circuits] Osnovy teorii i rascheta fazokorrektiruiushchikh tsepei. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1958. 292 p. (MIRA 11:12)

(Electric networks)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

AUTHOR: Taft, V. A. (Moscow) 103-19-6-4/13

TITLE: On the Stability of Periodic Methods of Operation in Automatic Control Systems Found Approximately on the Basis of the Filter Hypothesis (Ob ustoychivosti periodicheskikh rezhimov v sistemakh avtomaticheskogo regulirovaniya, naydennykh priblizhenno, iskhodya iz gipotezy fil'tra)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 6, pp 558 - 563 (USSR)

ABSTRACT: An approximate solution of the problem posed in reference 6 is suggested here. The problem reads. On the assumption that the system to be investigated contains a linear filter the conditions for the stability of periodic solutions on the basis of the same assumption are to be determined. At first the equation for small deviations is derived and the problem reduced to the characteristic equation of infinite order. By equating the determinant of this infinite set of equations to zero the characteristic equation of infinite order with regard to λ (the eigenvalue to be determined) is obtained. The roots of the equation represent the sought λ-values. In order that the investigated periodic regime

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

On the Stability of Periodic Methods of Operation in Automatic Control Systems Found Approximately on the Basis of the Filter Hypothesis 103-19-6 4/13

be stable it is necessary and sufficient that all roots have a negative real part. In this form the conditions of stability can practically not be used. Now the filter conditions are used. As the crossover gain is finite and the complex amplitudes of the components the frequencies of which exceed the crossover gain are equal to zero, one may pass from the infinite set of equations to a finite set of equations. The system (12) is obtained. By equating the determinant of the finite set of equations for the complex amplitudes to zero a polynomial with regard to λ with complex factors is obtained. The roots of this polynomial are the sought λ_i values. In order that the investigated periodic regime be stable it is necessary and sufficient that all $\mathrm{Re}\lambda_i > 0$. In order to find out whether all λ_i satisfy this condition, algebraic as well as frequency criteria can be used. In view of the fact that the roots of a polynomial with complex factors are to be investigated here the criterion of Shur can be used

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On the Stability of Periodic Methods of Operation in Automatic Control Systems Found Approximately on the Basis of the Filter Hypothesis 103-19-6-13

if algebraic criteria are used. If frequency methods are used e.g. the criterion of Mikhaylov can be used. At the end a comparison between the above-derived conditions of stability and the conditions suggested by Gol'dfarb (Reference 2) on the basis of the method of harmonic equilibrium is made. It is shown that the conditions of stability in both cases are different. There are 6 references, 6 of which are Soviet.

SUBMITTED: November 25, 1957

1. Servomechanisms--Theory

Card 3/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

PHASE I BOOK EXPLOITATION SOV/4955

Taft, Viktor Aleksandrovich, Doctor of Technical Sciences

Voprosy teorii elektricheskikh tsepey s peremennymi parametrami i sinteza impul'snykh i tsifrovykh avtomaticheskikh regulyatorov (Problems in the Theory of Electric Networks With Variable Parameters and in the Synthesis of Pulse and Digital Automatic Controllers) Moscow, Izd-vo AN SSSR, 1960. 102 p. Errata slip inserted. 8,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Energeticheskiy institut imeni G. M. Krzhizhanovskogo.

Resp. Ed.: P. I. Zubkov; Ed. of Publishing House: A. S. Filaretova; Tech. Ed.: V. Karpov.

PURPOSE: This monograph is intended for specialists in network design.

COVERAGE: The author discusses the theory of electric networks with variable parameters as applied in the investigation of periodical operating conditions in nonlinear

Card 1/7

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

systems, particularly in systems of automatic control. He investigates the problem of using frequency response methods for the stability analysis of such systems. In an earlier work the author discussed an attempted approximate solution of the stability problem based on the assumption that a linear component with properties of an ideal filter has been included in the system under investigation. He considers this approach as unsatisfactory and presents in this monograph an accurate method of solving the problem without assuming the inclusion of an ideal filter. This solution consists in the reduction to a finite form of the characteristic equation of the family of equations with periodically changing coefficients, expressed in the form of an infinite [Hill] determinant. The author uses the same method as the one employed for the deduction of the Hill equation. The results obtained can be used in solving several technical problems connected with the investigation of networks with variable parameters. When the object under control appears to be a system with variable

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

parameters, it becomes difficult to apply the usual method of system analysis and synthesis, namely the method of the z-transform. The difficulty is connected with the necessity of knowing the reaction of the network to the applied disturbance, in other words, the L-transform of this reaction. In particular, for systems with periodically or exponentially changing parameters, the L-transform of this reaction may be expressed with infinite determinants. Such complex expressions do not give a direct possibility of passing over to the z-transform. In the present work the author suggests a method which permits the passing over from the L-transform of the above indicated reaction to the finite transcendental functions of the operator p, which makes it possible to reduce the theory of networks with periodical parameters to a form analogous to the theory of long lines. Obtained relationships make it possible to pass over to the z-transforms and it then becomes possible to expand the z-transform methods to systems with variable parameters. No personalities are mentioned. There are 19 references.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, V.A.; SKOBELEV, V.A.

Programs for an electronic digital computer calculating transient processes in networks with periodically varying parameters. Elektroenergetika no.2:105-114 '60. (MIRA 14:3)
(Transients (Electricity)
(Electronic digital computers))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

MARKOVICH, I.M., doktor tekhn.nauk; TAFT, V.A., doktor tekhn.nauk; SOVALOV, S.A., kand.tekhn.nauk; VENIKOV, V.A., doktor tekhn. nauk; TSUKERNIK, L.V., kand.tekhn.nauk

Present-day use of computers in designing and operating electric power systems. Elektrichestvo no. 11:1-8 N '60. (MIRA 13:12)

1. Energeticheskiy institut AN SSSR (for Markovich, Taft & Sovalov). 2. Moskovskiy energeticheskiy institut (for Venikov). 3. Institut elektrotekhniki AN USSR (for TSukernik).

(Electronic calculating machines)
(Electric power)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

MARKOVICH, I.M., doktor tekhn.nauk; TAFT, V.A., doktor tekhn.nauk; SOVALOV, S.A., kand.tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; TSUKERNIK, L.V., kand.tekhn.nauk

Problems on the use of computers in designing and operating electric power systems. Elektrichestvo no. 12:9-15 D '60. (MIRA 14:1)

1. Energeticheskiy institut AN SSSR (for Sovalov). 2. Moskovskiy energeticheskiy institut (for Venikov). 3. Institut elektrotekhniki AN USSR (for TSukernik).
(Electronic claculating machines)
(Electric power plants)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

POPKOV, V.I.; TOLSTOV, Yu.G.; STEKOL'NIKOV, I.S.; MEYLEROVICH, A.A.; MOSKVITIN, A.I.; TAFT, V.A.; GORUSHKIN, V.I.; SOVALOV, S.A.; LIBKIND, M.S.

Sixtieth birthday of I.M. Markovich. Elektrichestvo no.5: 87 My '61. (MIRA 14:9)
(Markovich, Isaak Moiseevich, 1901-)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

SUSHCHINSKIY, M.M., doktor fiz.-matem.nauk; OBUKHOV, A.M.; GILYAROV, M.S., doktor biolog.nauk; TAFT, V.A., doktor tekhn.nauk; GLEMBOTSKIY, V.G., doktor tekhn.nauk; OLOFINSKIY, N.F., kand. tekhn.nauk

Scientific contacts with foreign countries. Vest. AN SSSR 31 no.12:101-105 D '61. (MIRA 14:12)

1. Chlen-korrespondent AN SSSR (for Obukhov).
(Science—Congresses)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

ACCESSION NR: AR4020772 S/0044/64/000/001/V052/V052

SOURCE: RZh. Matematika, Abs. 1V312

AUTHOR: Taft. V. A.

TITLE: Frequency methods of investigating periodic conditions in nonlinear circuits with concentrated and distributed constants.

CITED SOURCE: Tr. Tashkentsk. politekhn. in-ta, vy*p20, 1961, 109-121

TOPIC TAGS: frequency method, nonlinear circuit periodic condition, differential equation periodic solution stability, full Fourier series algebraic equation infinite system, characteristic equation, infinite determinant, meromorphic function, Loran series

TRANSLATION: In a previous paper RZh. Mat, 1960, 13906) the author considered the following approach to investigating the stability of the periodic solution of a system of nonlinear differential equations: by the usual method the equation is found in variations; its solution is sought in the form of a full

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

ACCESSION NR: AR4020772

Fourrier series; as a result an infinite system of algrbraic equations is obtained; the characteristic equation is found in the form of an infinite determinant for this system which is equated to zero. Further on this determinant is replaced by a finite one by means of the following operations: the elements of the determinant expanded into simple fraction; considering the determinant as a meromorphic function, it is expanded into a Loran series in neighborhoods of poles and the infinite determinant is transformed into a finite (according to the number of poles) sum of infinite sums; it is suggested general stability criteria be applied to the characteristic equation.

This paper contains a number of comments on the practical application of this procedure for investigating stability of periodic solutions.

M. Ayzerman

DATE ACQ: 03Mar64 SUB CODE: MM ENCL: 00

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

GORUSHKIN, V.I.; KOVAL'KOV, G.A.; KOZLOVSKIY, G.F.; LUTIDZE, Sh.I.; MARKOVICH, I.M.; MEYEROVICH, E.A.; MIKHNEVICH, G.I.; POPKOV, V.I.; STEKOL'NIKOV, I.S.; TAFT, V.A.; TOLSTOV, Yu.G.

Sixtieth anniversary of the birth of A.I. Moskvitin. Elektrichestvo no.4:94 Ap '62. (MIRA 15:5)
(Moskvitin, Anatolii Ivanovich, 1902-)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, V.A

...se of Laplace transformations method in systems with variable ...rI parameters. Elektroenergetika no.5:14-32 '62. (MIRA 15:4)
(Electric networks)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TOLSTOV, Yu.G.; MOSTKOVA, G.P.; KOVALEV, F.I.; TAFT, V.A., doktor tekhn. nauk, prof.; ZAVOZIN, L.F., red. izd-va; DOROKHINA, I.N., tekhn. red.

[Three-phaze semiconductor power rectifiers with magnetic amplifier control] Trekhfaznye silovye poluprovodnikovye vypriamiteli, upraviliaemye drosseliami nasyshcheniia. Moskva, Izd-vo Akad. nauk SSSR, 1963. 171 p. (MIRA 16:7)
(Electric current rectifiers)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

[illegible], V.A.; MILYUTIN, I.P.

Operating modes of a nonlinear electric network. Elektroenergetika no.7:136-147 '63. (MIRA 16:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

KUDRYAVTSEV, I.V.; MEYEROVICH, I.B.; SAVVINA, N.M.; TAFT, V.I.

Fatigue strength of shafts following nitriding and straightening. Metalloved. i term. obr. met. no.10:32-34 O '63. (MIRA 16:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya i zavod "Russkiy dizel'."

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFT, Viktor Aleksandrovich. Prinimali uchastiye: MILYUTIN, A.P.; KARNAUKHOV, A.F.

[Principles of the spectral theory and design of networks with variable parameters] Osnovy spektral'noi teorii i raschet tsepei s peremennymi parametrami. Moskva, Nauka, 1964. 205 p. (MIRA 17:11)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

USSR/Electricity - Analyzers 21 Feb 51
Transients

"Calculation of Transient Electromagnetic Conditions in Complex Electrical Systems With Rotating Machines Using an AC Network Analyzer," E. A. Meyerovich, V. D. Taft

"Dok Ak Nauk SSSR" Vol LXXVI, No 6, pp 835-837

Uses method for solving systems of differential eqs by representation of the soln over given interval previously proposed by Meyerovich to solve eqs of transient conditions for rotating

185T18

USSR/Electricity - Analyzers 21 Feb 51
(Contd)

elec mach on ac network analyzer. These eqs ordinarily have variable coeffs. Previously, network analyzer could be used only to solve systems of eqs with sym matrix and const parameters. Submitted 21 Dec 50.

185T18

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

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B 64
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621.313.3 621.3.016.1

3122 Calculation of unsteady electromagnetic load conditions in complex electrical systems with rotating machines on a.c. measuring tables. F. A. Meerovich and V. D. Taft. *Dokl. Akad. Nauk, SSSR* 76 (No. 6) 835-7 (1951) *In Russian*

Points out that, by independent oscillography of an equivalent circuit set up on an a.c. measuring table, it is possible to obtain the characteristic curves of unsteady load conditions. This only holds for equations with symmetrical matrices and constant parameters. In practice this is rarely true, and a method is therefore described to solve the differential equations involved by harmonic analysis, after which the equivalent a.c. circuit is set up as before. A number of formulae for solving different types of equations are included. F. M. Kerrow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFTA, Adelaida, ing.

Modern methods of physico-chemical analysis. Ind text Rum 14 no.7:320-324 '63.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

POPA, V.
Surname (in Caps); Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: Zootechnical Research Institute (Institutul de Cercetari Zootehnice).

Source: Bucharest, Probleme Zootehnice si Veterinare, No 5, 1961, pp 29-37.

Data: "Results Obtained in the Formation of a Nucleus of Fine-Wooled Sheep at the Collective Farm of Bod, Brasov Regiune."

Co-author:

POPA, Al., Dr., Zootechnical Research Institute (Institutul de Cercetari Zootehnice).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAFTAS, L.M.

Simple device for protecting the eyes when using the microscope. Lab.delo 2 no.6:27 N-D '56. (MLRA 9:12)

1. Iz Zheleznodorozhnoy bol'nitsy stantsii Kaumas.
(MICROSCOPE)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGA, L.

2

Experimental contributions to the study of the gel of aluminum hydroxide as a virus adsorbent. Victor Georgescu and Lisette Taga. *Comun. acad. rep. populare Romîne* 5, 1717-22(1955).—Modifications of Goret's method for the prepn. of Al hydroxide gel (I) are suggested, which permit the utilization of tech. starting materials. The absorption capacity of the modified I is good and its physico-chem. consts. are of higher values than G.'s prepn. E. M.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Author (in Eng.): Given Name:

Country: Rumania

Academic Degree: Dr.

Affiliation: Institute of Pathology and Animal Hygiene (Institutul de Patologie si Igiena Animala).

Source: Bucharest, Institutul Cercetarilor si Veterinare, No 7, Jul 61, pp 41-50.

Data: "The Use of Globulins from the Anti-Aujeszky Serum in the Prevention of Aujeszky-Disease in Suckling Piglets."

Co-author:

Vaida, L., Institute of Pathology and Animal Hygiene.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

KREINDLER, A.; TAGA, M.; OLTEANU, I.; COSOVEANU-VOINESCU, S.; WEGHENER, M.

The protective effect of an intracerebral injection of tellurium on the evolution of rabies encephalitis in rabbits. Bul. stiint., sect. med. 8 no.4:973-985 Oct-Dec 56.

(RABIES, experimental
eff. of intracerebral inject. of tellurium on course of rabietic encephalitis, in rabbits)
(ENCEPHALITIS, exper.
rabietic, in rabbits, eff. of intracerebral inject. of tellurium on evolution)
(TELLURIUM, effects
on evolution of exper. rabietic encephalitis in rabbits, admin., intracerebral)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

R

COUNTRY : RUMANIA

[illegible] : [illegible] Diseases Caused by [illegible]

[illegible]

AUTHOR : Popovici, I.; [illegible], M.; Cirstet, I.

INST. : Rumanian Academy

TITLE : Vaccination against Infectious Agalactia of Sheep and Goats with Live Cultures

[illegible] : Bul. stiint. Acad. RPR. Sec. biol. si stiinte agric. Ser. agron., 1957, [illegible], No 1, 71-7[illegible]

ABSTRACT : Four-year experience in vaccination of sheep and goats in Rumania against infectious agalactia (in [illegible], 328,000 animals were inoculated) with live culture of the attenuated strain of Capromyces agalactiae showed that 10-12 days after inoculation a stable immunity lasting not less than 12 months takes place. Vaccinated ewes present no danger to their sucklings nor to other nonvaccinated animals. In lactating animals, following vaccination a rapidly passing decrease of the

[illegible] : 1/[illegible]

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

MILCU, St.M.; POP, Al.; LUPULESCU, A.; ANGELESCU, E.; DAMIAN, Al.; TAGA, M.

Experimental & clinical investigations on certain antithyroid auto-immunological processes. Rumanian M. Rev. 3 no.1:35-40 Jan-Mar 59.

(ANTIGEN-ANTIBODY REACTIONS
auto-immun. mechanisms in thyroid gland of man & rabbits)
(THYROID GLAND
auto-immun. mechanisms in man & rabbits)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

ILIESCO, M.; BERCEANU, St.; TURCANU, Al.; VAINER, Henriette; RADULESCO, Elena; TAGA, M.

Study of the changes in blood proteins in horses experimentally infected with A.I.C. virus (infectious anemia of horses) and their relations to the morphological and immuno-serological changes. Arch. Roum. path. exp. microbiol. 20 no.3:491-501 S '61.

1.Travail de lInstitut "Dr. I. Canacuzino" Services d'Hematologie-Serologic et d'Immunochimie.
(VIRUS DISEASES experimental) (HORSES diseases)
(BLOOD PROTEINS) (RETICULOENDOTHELIAL SYSTEM pathology)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

POP, Al.; TAGA, M.; OPRISAN, Alis; DEMETRESCO, R.

Anti-organ isoensitization as a renal localizing factor in experimental tuberculosis in guinea pigs. Arch. Roum. path. exp. microbiol. 22 no.1:29-40 Mr '63.

(TUBERCULOSIS, RENAL) (TUBERCULOSIS)
(KIDNEY) (TISSUE EXTRACTS)
(FREUND'S ADJUVANT) (ANTIGEN-ANTIBODY REACTIONS)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

RUMANIA

TAGA, M., Dr, and PATRASCU, I., Veterinarian, of the "Pasteur" Institute for Veterinary Research and Biological Products.

"New Aspects Concerning Newcastle Disease in Fowl Breeding Units."

Bucharest, Revista de Zootehnie si Medicina Veterinara, Vol 16, No 4, Apr 66, pp 53-64.

Abstract [Authors' English summary modified]: The authors discuss outbreaks of Newcastle disease in large poultry-raising units that occurred in the last two years. The laboratory tests used to diagnose the disease in some characteristic foci are described, the probable causes for the appearance of the disease are analyzed (even in vaccinated units), and the means of combatting the outbreaks in the various cases are discussed.

Includes 4 figures, 2 tables and 9 references, of which 2 German, 2 French and 5 English-language. --

1/1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

1. TAGAMLIK, D. Ye.

2. USSR (600)

4. Automobiles - Motors

7. Air filters of automobile and tractor engines. Avt. trakt. prom. no. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, D.Ye., inzhener.

Increasing the efficiency and safety of two-rotor volumetric pumps. Vest.mash. 36 no.11:13-22 N '56. (MLRA 10:1)
(Pumping machinery)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, V., nauchnyy sotrudnik; TEREKHINA, P., nauchny sotrudnik.

One-family pressboard frame house. Sel'.stroi. 11 no.5:14-16 My '56. (MIRA 9:9)

1.Nauchno-issledovatel'skiy institut Gorsel'stroya Ministerstva gorodskogo i sel'skogo stroitel'stva RSFSR.
(Architecture, Domestic--Designs and plans)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

PROCESSES AND PROPERTIES INDEX

Heat insulator. V. I. TAGAMLIK. U.S.S.R. 66,243, May 31, 1946; abstracted in *Chem. Zentr.*, 1948, I [3] 285.—Sawdust (60 gm.) is immersed in a hot suspension of $Ca(OH)_2$ with a CaO content of 10 gm.; after 24 hr., ashes of pulverized fuel (20 gm.) are added during stirring, and finally a lime suspension (CaO content 10 gm.) until the mass is pasty. It is then formed in the usual manner.

M.HA.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

YEZERSKIY, Anatoliy Natanovich, inzhener; TAGAMLIK, Vladimir Il'ich, inzhener; UDOD, V.Ya., redaktor; STOLYAROV, N.T., inzhener, nauchnyy redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor.

[Production and use of building materials made from reeds] Proizvodstvo i primenenie stroitel'nykh materialov iz kamysha. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1954. 68 p. [Microfilm] (Building materials) (Rush work) (MIRA 8:2)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, V. L.

35494. Tuberkulinoterapiya pri tuberkuleznykh zabolevaniyakh. Glaz. Trudy sev. -oset. Gos. Med. In-ta, vyp. 4, 1949, c. 170-73.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TA[illegible]LIK, [illegible]

[illegible]476. Gipertonicheskaya b lezn' i organ zreniya. Trudy Ser.-Oset. [illegible]. red. in-ta, vyp. 4, 1949, s. 174-[illegible]1.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, V.L., kandidat meditsinskikh nauk

Molluscum contagiosum. Vest.oft. 69 no.6:40-41 N-D '56. (MLRA 10:2)

1. Iz Dorozhnoy bol'nitsy Ordzhonikidzevskoy zheleznoy dorogi (konsul'tant professor M.N.Bugulov)
(SKIN--DISEASES)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, [illegible] kand. med. nauk

Changes in the fundus vault in rheumatic fever. Preliminary report. Sport. nauch. trud. SOGMI no.14:178-182 [illegible]

[illegible] 18 [illegible]

[illegible] Nauk [illegible] prof. M.N. Bogolov [illegible] [illegible] zhelezhny [illegible] [illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLIK, V. T.

C-4 1-3, 45

Heat insulator. V. I. TAGAMLIK. U.S.S.R. 66,243, May 31, 1946; abstracted in *Chem. Zentr.*, 1948, I [3/4] 265.—Sawdust (60 gm.) is immersed in a hot suspension of $Ca(OH)_2$ with a CaO content of 10 gm.; after 24 hr., ashes of pulverized fuel (20 gm.) are added during stirring, and finally a lime suspension (CaO content 10 gm.) until the mass is pasty. It is then formed in the usual manner.

M.HA.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

USSR/Medicine - Communicable Diseases
Medicine - Public Health

Aug 48

"Graphic Method of Explaining the Mechanism of the Progress of Outbreaks of Infectious Diseases," R. L. Tagamlitskaya, Saratovsk Mun Sanitary-Bacteriol Lab, 2 pp

"Sov Med" No 8

Graphic representations of sources of infection, hospitalization of cases and epidemiological relationships between various outbreaks of infection.

FDB

24/49T72

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Tagamlitski, Ia.

Tagamlizki, J. Funktionen, die auf der reellen achse gewissen Ungleichungen genügen. Annuaire [Godišnik] Univ. Sofia. Fac. Phys.-Math. Livre 1. 42, 239–256 (1946). (Bulgarian. German summary)

The author has outlined a proof that (*) $|f^{(k)}(x)| \leqq Ae^x$ for $k=0, 1, 2, \cdots$ and $x<a$ implies $f(x)=Ce^x$, $|C| \leqq A$ [C. R. Acad. Sci. Paris 223, 940–942 (1946); these Rev. 8, 259]. For other proofs see Obrechkoff [C. R. Acad. Sci. Paris 224, 993–995 (1947); these Rev. 8, 448] and Boas [C. R. Acad. Sci. Paris 224, 1683–1685 (1947); these Rev. 8, 569]. Here the author gives a proof in detail and also shows that the theorem remains true if (*) holds only for $x=x_n$, $x_n \to -\infty$, provided that $f(x)$ is analytic; or if (*) holds only for $k=k_n$, $k_n \to \infty$, if $f(-\infty)=0$. Among the applications are an analogous result in which the conclusion is $f(x)=C/(x+a)$ and one in which $e^{-x}f^{(k)}(x)$ is replaced by $\Lambda^k f(x)$, where $\Lambda f(x)=[\varphi(x)f(x)]'/\varphi'(x)$, $\varphi(x)$ being real and of class C^∞ in $a<x<b$, $\varphi(b-)=0$, $\varphi'(x)\neq 0$.

R. P. Boas, Jr. (Providence, R. I.).

Source: Mathematical Reviews, 1948, Vol 9, No. 1

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITZKI, J.

Tagamlitzki, J. Über Zahlenfolgen, die gewissen Ungleichungen genügen. Annuaire [Godišnik] Univ. Sofia. Fac. Phys.-Math. Livre 1. 43, 193–237 (1947). (Bulgarian. German summary)

[Volume number misprinted 42 on title page.] Proof of the following and related theorems on sequences and functions. If $f(x)$ satisfies, for each $k=0, 1, 2, \cdots$ and $x>a$, the inequality $|f^{(k)}(x)| \leqq Ae^{-x}$, then there is a constant C such that $f(x)=Ce^{-x}$ for $x>a$. *R. P. Agnew* (Ithaca, N. Y.).

Source: Mathematical Reviews, Vol 12 No. 5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

~~TAGAMLICKIY, Ya. A.~~ Tagamlitskiy, Ya. A.

3

Tagamlickiĭ, Ya. A. On the integration of sequences of functions. Doklady Akad. Nauk SSSR (N.S.) 57, 17–19 (1947). (Russian)

Let E be a measurable point-set of finite Lebesgue measure in Euclidean n-space, and let f_n $(n=1, 2, \cdots)$ be a sequence of summable functions in E which converge asymptotically to f [i.e., for each $\epsilon>0$ the measure of the set $|f_n-f|>\epsilon$ tends to 0 as $n\to\infty$]. Denote by $I_n(e)$ the integral of f_n on the measurable subset $e\subset E$. The author establishes two equivalent conditions (I) and (II), each of which is necessary and sufficient in order that f be summable and that $\int f_n\to\int f$ on every $e\subset E$. (I) For each infinite selection $n=n_k$ of the f_n, there exists a summable $\varphi\geqq 0$ so that $|f_n|\leqq\varphi$ for some arbitrarily large $n=n_k$. (II) Each infinite selection $n=n_k$ of the $I_n(e)$ has at least one absolutely continuous limit-function $J(e)$, where (for each e) $J(e)$ is any limit of the selection $n=n_k$ of the numbers $I_n(e)$. *L. C. Young.*

Source: Mathematical Reviews, 1948, Vol 9, No. 4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITSKIY, Ya. A.

Tagamlickiĭ, Ya. A. On absolutely convergent Dirichlet series. Doklady Akad. Nauk SSSR (N.S.) 57, 873–878 (1947). (Russian)

Tagamlickiĭ, Ya. A. On the absolutely convergent Laplace integral. Doklady Akad. Nauk SSSR (N.S.) 58, 197–200 (1947). (Russian)

Necessary and sufficient conditions for $f(x)$ to be an absolutely convergent Laplace integral, or an absolutely convergent Dirichlet series with exponents λ_n, for $x>a$, are that $|f^{(k)}(x)| \leqq (-1)^k g_k(x)$ for $k=0, 1, 2, \cdots$ and $x>a$, where $g(x)$ is, respectively, of the form $\int_0^\infty e^{-xt}G(t)dt$, $G(t) \geqq 0$, or $\sum G_n e^{-\lambda_n x}$, $G_n \geqq 0$. These results were also obtained, respectively, by Loève and Boas in notes inspired by earlier work of the author [see C. R. Acad. Sci. Paris 225, 31–33 (1947); 224, 1683–1685 (1947); 223, 940–942 (1946); these Rev. 9, 82; 8, 569, 259].

R. P. Boas, Jr.

Source: Mathematical Reviews 1948, Vol 9, No. 5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Tagamlitzki, Y.

Tagamlitzki, Y. Sur une propriété de la fonction exponentielle. C. R. Acad. Bulgare Sci. Math. Nat. 1, 33–34 (1948).

The author gives an elementary proof of his theorem that an infinitely differentiable function $f(x)$ such that $|f^{(n)}(x)| \leqq A\sigma^{-x}$, $n=0, 1, 2, \cdots$; $x \geqq a$ is necessarily of the form $f(x)=C\sigma^{-x}$.

H. Pollard (Ithaca, N. Y.).

Source: Mathematical Reviews, Vol 10 No. 6

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITZKI, Y.

Tagamlitzki, Y. Recherches sur une classe de fonctions. Annuaire [Godišnik] Univ. Sofia. Fac. Sci. Livre 1. (Math. Phys.) 44, 317–356 (1948). (Bulgarian. French summary)

For the main results of this paper see a series of notes by the author [Doklady Akad. Nauk SSSR (N.S.) 57, 875–878 (1947); 58, 197–200 (1947); C. R. Acad. Sci. Paris 223, 940–942 (1946); 225, 976–978, 1053–1055 (1947); these Rev. 9, 237; 8, 259; 9, 182, 280]. The results of the first two notes are given new proofs and appear in generalized form. The author begins by considering the class $K(a)$ of functions having derivatives of all orders on $[a, \infty)$ and satisfying $f^{(k)}(x)=o(x^{-k})$ as $x\to\infty$, and introducing a partial order by writing $f_1(x)\subset f_2(x)$ if f_1-f_2 is completely monotonic for $x>a$. If $\varphi\supset f$ for every f of a subset of $K(a)$, φ is called a majorant for that subset; if a subset has a majorant, it has a smallest majorant. A series of theorems establish the expected properties of $K(a)$ as a partially ordered linear space. As an example of the author's applications, we sketch his proof that $f(x)$ is represented by a Dirichlet series with given exponents λ_n if there is a $g(x)$ with the same exponents and nonnegative coefficients such that $|f^{(k)}(x)|\leqq(-1)^k g^{(k)}(x)$, $k=0, 1, 2, \cdots$ [cf. the first note cited above and Boas, C. R. Acad. Sci. Paris 224, 1683–1685 (1947); these Rev. 8, 569]. Let $\varphi(x)=g(x)+f(x)$; then $0\subset\varphi(x)\subset 2g(x)$. Let $\theta_n(x)$ be the common majorant of $\varphi(x)$ and $2s_n(x)$, where s_n consists of the first n terms of $g(x)$; this majorant exists in virtue of the author's theorem that two functions with a common minorant have a common majorant. It follows from properties of the partial ordering that $0\subset\theta_n(x)-\theta_{n-1}(x)\subset 2B_n e^{-\lambda_n x}$, $n=1, 2, 3, \cdots$; $\theta_0(x)=0$. Hence the theorem is reduced to the case where $g(x)$ consists of a single term [see the third of the author's notes cited above]. A similar argument applies to Laplace integrals and eventually leads to a new proof of the Bernstein-Widder representation of completely monotonic functions.

R. P. Boas, Jr. (Evanston, Ill.).

Source: Mathematical Reviews, Vol. 12 No. 5

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITZKI, Y

Tagamlitzki, Y. Sur quelques applications de la théorie générale des espaces vectoriels partiellement ordonnés. Annuaire [Godišnik] Univ. Sofia. Fac. Sci. Livre 1. 45, 263–286 (1949). (Bulgarian. French summary)

This paper is concerned with partially ordered linear spaces over an ordered field (which in all applications mentioned is either the rational or real field). Let the order relation in such a space R be denoted by the symbol $\leqq$. The following axioms are assumed: (1) $a=b$ implies $a\leqq b$; (2) $a\leqq b$ and $b\leqq a$ imply $a=b$; (3) $a\leqq b$ and $c\leqq d$ imply $a+c\leqq b+d$; $a\leqq b$ and $\lambda\geqq 0$ imply $\lambda a\leqq \lambda b$. A partially ordered linear space R is said to be normal (completely normal) if every finite (arbitrary) set of elements admitting an upper bound admits a least upper bound. As the author notes, this is weaker than the requirement that R be lattice ordered or complete-lattice ordered. A positive nonzero element $p\epsilon R$ is said to be simple if $0\leqq a\leqq p$ implies that $a=\lambda p$ for some scalar λ. [Reviewer's note. The elementary positive definite functions of Gel'fand and Raikov [Rec. Math. [Mat. Sbornik] N.S. 13(55), 301–316 (1943); these Rev. 6, 147] provide an obvious example of such elements.] A number of simple facts, most of them well-known, are proved concerning relations between suprema, infima, and addition in normal and completely normal spaces; the introduction of order in a linear space with convergence is also discussed. More interesting is the following result. Let R be completely normal. Let $\{p_n\}_{n=1}^{\infty}$ be a sequence of simple elements, let $\{\beta_n\}_{n=1}^{\infty}$ be a sequence of nonnegative scalars, and let $\sum_{n=1}^{\infty}\beta_n p_n$ be an infinite series whose partial sums are representable as the difference of monotone increasing bounded sequences, so that $b=\sum_{n=1}^{\infty}\beta_n p_n$ exists. Then, if a is any element such that $-b\leqq a\leqq b$, there exist scalars α_n such that $|\alpha_n|\leqq\beta_n$ $(n=1, 2, \cdots)$ and $a=\sum_{n=1}^{\infty}\alpha_n p_n$. Two similar theorems are also proved.

These results are applied to the study of a particular partially ordered linear space R^*, whose elements consist of all infinitely differentiable functions defined on some interval (a, b). Sums and real multiples are defined as usual. A partial ordering in R^* is defined by means of a sequence of numbers x_0 $x_1\leqq x_2\leqq\cdots\leqq x_n\leqq\cdots$ in (a, b) with limit b. A function $f\epsilon R^*$ is nonnegative if $(-1)^k f^{(k)}(x)\geqq 0$ for $a<x<x_k$ $(k=0, 1, 2, \cdots)$. It is proved that R^* is completely normal. It is also proved that the Gončarov polynomials P_n [Ann. Sci. École Norm. Sup. (3) 47, 1–78 (1930)], multiplied by $(-1)^n$, are simple elements of R^*. Finally, it is proved that a function f in R^* can be expanded in an absolutely convergent series of simple elements p_n of R^* (which may or may not be the Gončarov polynomials) if and only if there exists an absolutely convergent series $\sum_{n=1}^{\infty}\beta_n p_n=g$, where the coefficients are nonnegative, such that $|f^{(k)}(x)|\leqq(-1)^k g^{(k)}(x)$ for $a<x<x_k$ and $k=1, 2, 3, \cdots$. Thus a result is obtained paralleling those of Gončarov [loc. cit.].

E. Hewitt (Seattle, Wash.).

Source: Mathematical Reviews, Vol 12 No. 6

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

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Tagamlitzki, Y.

4

Interpolation
Series

Tagamlitzki, Y. Über die Abelsche Interpolationsreihe. ~~Annuaire~~ [Godišnik] Univ. Sofia. Fac. Sci. Livre 1. 46, 385–443 (1950). (Bulgarian. German summary)

The results of this paper were summarized in Doklady Akad. Nauk SSSR (N.S.) 80, 17–20 (1951); these Rev. 13, 329. *R. P. Boas, Jr.* (Evanston, Ill.).

Source: Mathematical Reviews, Vol 13 No. 9

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[illegible], M.

"The Geometry of Cones in Hilbert's Spaces. Tr. from the Russian." p.85 (DOKLADY, [illegible] I FIZIKA, Vol. 87, no. 1, pt. 2, 1950/51-1951/52, Sofiya.)

SO: Monthly List of ~~Russian~~ East European Accessions, Library of Congress, March ~~1953~~ 1954, Uncl. / Vol. 3, No. 3

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Mathematical Reviews
Vol. 14 No. 10
Nov. 1953
Analysis

Tagamlitzki, Y. Übertragung des Minkowskischen Stützebenensatzes auf Hilbertsche Räume. C. R. Acad. Bulgare Sci. 4 (1951), no. 2-3, 5-8 (1953). (Russian. German summary)

Let H be a not necessarily separable real Hilbert space. Let K and L be subsets of H which are strongly closed and have the property that $a, b \in K$ (L) and $\alpha, \beta \geqq 0$ imply $\alpha a + \beta b \in K$ (L). Here K and L are said to be convex closed cones. Suppose further that K is pointed, i.e., that $(k_1, k_2) > 0$ for all $k_1, k_2 \in K$ which are distinct from 0. Then, if $K \cap L = \{0\}$, there exists an element $s \in H$ such that $(s, k) \geqq 0$ for all $k \in K$ and $(s, l) < 0$ for all $l \in L$ which are different from 0. This generalizes a theorem of Minkowski concerning planes of support for convex sets in finite-dimensional spaces [Ges. Abh., Bd. 2, Teubner, Leipzig-Berlin, 1911, pp. 137–229]. It is also to be compared with the weaker separation theorems known for general locally convex topological linear spaces [e.g., N. Bourbaki, Eléments de mathématique, XV, Première partie, Livre V, Chap. II §3, Actualités Sci. Ind., no. 1189, Hermann, Paris, 1953; these Rev. 14, 880].

E. Hewitt (Seattle, Wash.).

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITSKIY, Ya-A

Tagamlickii, Ya. A. On a generalization of Abel's series. Doklady Akad. Nauk SSSR (N.S.) 80, 17-20 (1951). (Russian)

Let $\{x_n\}$ be an arithmetic progression with difference τ, $x_0>a$; the author calls $f(x)$ positive definite if $(-1)^k f^{(k)}(x)\geqq 0$ for $a<x\leqq x_k$, $k=0, 1, 2, \cdots$; this is an extension of the notion of a completely monotonic function. A partial ordering is introduced by putting $f_2(x)\subset f_1(x)$ if $f_1(x)-f_2(x)$ is positive definite, and $f(x)$ is called indecomposable if $0\subset\phi(x)\subset f(x)$ implies $\phi(x)=Cf(x)$ (constant C). The author has previously shown [same Doklady (N.S.) 75, 337-340 (1950); these Rev. 12, 396] that besides the Abel Polynomials $P_n(x)=(x_0-x)(x_n-x)^{n-1}/n!$ the functions

$$(x_0-x)\exp[(x_0-x)/\tau]=\lim n!P_n(x)\tau^{-n+1}\tau^{-n+1}$$

are indecomposable; he states here that in addition the functions $R(x, t)=\{\exp[\lambda(x_0-x)]-\exp[\mu(x_0-x)]\}/(\lambda-\mu)$ with $\tau\lambda e^{1-\lambda\tau}=\tau\mu e^{1-\mu\tau}=t$, $0<\mu<\tau^{-1}<\lambda$, are indecomposable, and that these three classes (and their constant multiples) exhaust the class of indecomposable functions. His main result is an expression of every positive definite function in terms of indecomposable functions: $F(x)$ is positive definite if and only if

$$F(x)=\sum_{n=0}^{\infty}a_nP_n(x)+\int_{0+}^{1}R(x, t)d\alpha(t),$$

where $R(x, 1)$ is to be interpreted as $(x_0-x)\exp[(x_0-x)/\tau]$, a_n are nonnegative and $\alpha(t)$ is nondecreasing.

R. P. Boas, Jr. (Evanston, Ill.).

SOFIA UNIV, Sofia Bulg.

Source: Mathematical Reviews, Vol 13 No. 4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

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[illegible], [illegible]

[illegible]

Generalization of a theorem of Minkowski. Nap. mat. nauk [illegible] 2(48), 1952

1952

9. Monthly List of Russian Accessions, Library of Congress, August 1953. Unclassified.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITZKI, Y.

Mathematical Reviews
Vol. 15 No. 2
Feb. 1954
Analysis

Tagamlitzki, Y. Zur Geometrie des Kegels in den Hilbertschen Räumen. Annuaire [Godišnik] Fac. Sci. Phys. Math., Univ. Sofia, Livre 1, Partie II. 47, 85–107 (1952). (Bulgarian. Russian and German summaries)

Let H be a (possibly incomplete) real Hilbert space. A non-void subset R of H is a cone if $tr \in R$ for all $r \in R$ and non-negative numbers t. A cone R is said to be ordinary if there exists $n \in H$ such that $(n, r) > 0$ for $r \in R$, $r \neq 0$. A cone R is called strongly compact if every sequence $\{r_n\}_{n=1}^{\infty}$ of elements of R with bounded norms admits a subsequence converging strongly to an element of R. An element a of R is said to be irreducible with respect to R if a cannot be written as a linear combination of two linearly independent elements of R (i.e., if $b \in R$ and $a - b \in R$ imply that $a = \lambda b$ for some real λ). Fundamental theorem. Let R be an ordinary strongly compact cone and let K be a strongly closed convex cone such that $K \subset R$ and $K \neq R$. Then there exists an element $a \in R \cap K'$ which is irreducible with respect to R. The following stronger property is also established for a. There exist s and n in H such that $(n, x) > 0$ and

$$\left\| \frac{a}{(n, a)} - s \right\| \geq \left\| \frac{x}{(n, x)} - s \right\|$$

(over)

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for all $x \in R$. This theorem is used to give new proofs of the Hausdorff moment theorem, Bernstein's representation theorem for completely monotone functions, and to establish two other theorems of the same general type. One of these asserts that if $f(x)$ is defined for $a \leqq x \leqq b$, if $f(x) \leqq f(a)$ for $a < x \leqq b$, if f has derivatives of all orders for $a < x \leqq b$, if $(-1)^k f^{(k)}(x) \geqq 0$ for $a < x \leqq b$ and $f^{(k)}(b) = 0$ for $k = 0, 1, 2, \cdots$, then $f(x) \equiv 0$. The method of proof is simple. For the Hausdorff moment theorem, for example, H = all sequences $\{d_n\}_{n=0}^{\infty}$ such that $\sum_{n=0}^{\infty} a_n^2 2^{-n} < \infty$. The cone R is taken as all sequences $\{a_n\}_{n=0}^{\infty}$ for which $(-1)^k \Delta^k a_m \geqq 0$, $k, m = 0, 1, 2, \cdots$. The cone K (clearly $\subset R$) is defined as all $\{\int_0^1 t^n d\alpha(t)\}_{n=0}^{\infty}$ for increasing $\alpha(t)$. It is shown that $K = R$ by proving that any vector irreducible with respect to R lies in K. *E. Hewitt* (Seattle, Wash.).

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITSKIY, YA. A.

PA 245T75

USSR/Mathematics - Interpolation 11 Nov 52

"Interpolational Newton Series With Nonnegative Coefficients," Ya. A. Tagamlitskiy, Math Inst of Sofia U, Bulgaria

"Dok Ak Nauk SSSR" Vol 87, No 2, pp 183-186

Finds the conditions for which a function f(x) infinitely differentiable for x satisfying a certain inequality relation is expandable in a Newton series with nonnegative coefficients. Submitted by Acad S. N. Bernshteyn 19 Sep 52

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLICKI, Ya.

Tagamlicki, Ya. Investigation of vectors which are irreducible relative to certain cones. Bŭlgar. Akad. Nauk. Izvestiya Mat. Inst. 1, 57–68 (1953). (Bulgarian. Russian summary)

Irreducible elements of cones in inner product spaces, which have been utilized by the author in a previous communication [Annuaire [Godišnik] Fac. Sci. Phys. Math., Univ. Sofia, Livre 1, Partie II. 47, 85–107 (1952); these Rev. 15, 135] are here applied to a special case of a construction due to M. G. Kreĭn [Uspehi Matem. Nauk (N.S.) 6, no. 4(44), 3–120 (1951); these Rev. 13, 445]. Let S_n be the cone in R^{n+1} consisting of all $\{a_0, a_1, \cdots, a_n\}$ such that $\sum_{i=0}^{n} a_i\alpha_i \geqq 0$ for all $\{\alpha_0, \alpha_1, \cdots, \alpha_n\}$ such that $\sum_{i=0}^{n} \alpha_i t^i \geqq 0$ for all $t \geqq 0$. It is proved that the irreducible elements of S_n are (1) all vectors $\{0, 0, \cdots, 0, a_n\}$ with $a_n > 0$ (2) all vectors $\{a_0, a_0q, \cdots, a_0q^n\}$ with $q > 0$. The author's theorem on irreducible elements [loc. cit.] enables him to show that the elements of S_n all have the representation

$$\left\{c\delta_{rn} + \int_0^\infty t^r d\alpha(t)\right\}_{r=0}^{n}$$

for $c \geqq 0$ and α a monotone increasing function on $[0, \infty]$ with $\alpha(\infty) < \infty$. A passage to the limit as $n \to \infty$ is used to solve the Stieltjes moment problem, although the details are not given. A similar argument with a different cone leads to a solution of the Hamburger moment problem.

E. Hewitt (Seattle, Wash.).

Mathematical Reviews
May 1954
Analysis

10-7-54

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

~~TAGAMLICKI, YA.~~ TAGAMLITSKI, IA.

Tagamlicki, Ya. On a generalization of the concept of irreducibility. Ann. Univ. Sofia Fac. Sci. Phys. Math. Livre 1. 48 (1953/54), 69–85 (1954). (Bulgarian. Russian summary)

Math

Let K be an additive abelian semigroup with a zero, admitting nonnegative real numbers as operators, and satisfying the usual compatibility conditions (i.e., K would be a linear space if subtraction were possible). Let P be a norm for K subject to the usual conditions. An element $a\neq 0$ in K is irreducible if $0\neq a=b+c$ and $P(a)=P(b)+P(c)$ implies that $\lambda b=\mu c$ for non-negative numbers λ and μ such that $\lambda+\mu>0$. Imposing some heavy further conditions on K, the author proves that irreducible elements exist. Applications are made to various known theorems on moments. [For earlier work in the same spirit, see Bulgar. Akad. Nauk. Izv. Mat. Inst. 1 (1953), 57–68, and the literature there cited; MR 15, 442.] *E. Hewitt.*

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TABARLITSKI, Ya.

Completion of cones and application to the task of generalization of functions. Pt. 2. p. 41. (GODISHNIK. MATEMATIKA I FIZIKA, Vol. 49, No. 1, 1954/55 (published 1956, Sofia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 9, Sep 1957. Uncl.

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TAGAMLITSKI, YA.

Completion of cones and application to the task of generalization of the concept of function. Pt. 3 (Conclusion) p. 135.

GODISHNIK, MATEMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50 No. 1 1955/56 (Published 1957)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TACAMLITSKI, IA.

SCIENCE

Periodical IZVESTIIA. Vol. 2, no. 2, 1957.

TACAMLITSKI, IA. On a category of Goncharov's interoplation series and the spaces and cones connected with them. p. 163.

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

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITSKI, IAroslav, prof.

On the indivisible elements of some cones in analytic functions. Izv Mat inst BAN 6:51-60 '62.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Matematicheskiia institut", Chlen-kor. na Bulgarskata akademiia na naukite.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAMLITSKI, IAroslav, prof.

Principle of separability in the Abelian associative spaces. Izv Mat inst BAN 7 169-183 '63.

1. Chl.-korespondent na Bulgarskata akademiia na naukite, chlen na Redaktsionnata kolegiia, "Izvestiia na Matematicheskiia institut."

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

EXCERPTA MEDICA Sec.12 Vol.11/9 Ophthalmology Sept 57

1451. TAGAMLUK V. * Kontagiosny mollusk. Molluscum contagiosum VESTN.OFTAL. 1956, 6 (40-41)

Two cases of molluscum contagiosum are reported. In a 3-year-old child, a firm round growth, size 0.8 cm., was located at the lateral margin of the upper left lid. There was an indentation at the centre, from which caseous matter could be expressed. The cornea was ulcerated and there was a dermatitis of the left lid and skin of the cheek. The content of the growth was removed with diathermocoagulation of the wound. In the second, a 31-year-old male, a firm growth, size 1.5 x 1 cm. was present at the left upper lid, which was slowly increasing in size during 3 yr. The growth was removed. In both cases the pathological finding was the presence of typical corpuscles. Sitchevska - New York, N.Y

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

TAGAN, I.L., elektromekhanik (st. Krasnyy Liman Donetskoy dorogi).

Improve the construction of the SPV dlectric drive for switches.
Avtom., telem. i sviaz' 2 no.10:43 O '58. (MIRA 11:10)
(Railroads--Switches--Electric driving)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

RUMYANTSEV, P.K.; RYZHKOV, M.S.; ALEKSEYEV, P.A.; IVANOV, A.I.; TAGAN, I.L., elektromekhanik; LYUBIN, A.P.

Discussion of the article "Pedal or track circuit." Avtom., telem. i sviaz' 9 no.10:38-39 O '65. (MIRA 18:11)

1. Starshiy elektromekhanik Velikolukskoy distantsii Oktyabr'skoy dorogi (for Rumyantsev). 2. Starshiy elektromekhanik Mikun'skoy distantsii Severnoy dorogi (for Ryzhkov). 3. Zamestitel' nachal'nika Nyandomskoy distantsii Severnoy dorogi (for Alekseyev). 4. Glavnyy inzh. Nyandomskoy distantsii Severnoy dorogi (for Ivanov). 5. Krasnolimanskaya distantsiya Donetskoy dorogi (for Tagan). 6. Glavnyy inzh. Kishinevskoy distantsii signalizatsii i svyazi Odessko-Kishinevskoy dorogi (for Lyubin).

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[illegible]

[illegible] in the eastern part of the Bol'shoy [illegible] no.36:219-222 '63. [illegible]

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[illegible]

[illegible], [illegible], [illegible] I. [illegible].

Dvizhenie gaza v mestu i sverkhzvukovoi zone i nekotorye usloviia razrusheniia potentsial'nogo techeniia. (Prikladnaia matematika i mekhanika, 1946, v. 10, no. 4, p. 480-502, diagrs., bibliography)

Summary in English.

Title tr.: Gas motion in a local supersonic region and conditions of potential-flow break-down.

Reviewed in Applied Mechanics Reviews, 1949, v. 3, no. 7, item 1319.

QA801.F7 1946

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Gas Motion in a Local Supersonic Region and Conditions of Potential-Flow Breakdown. A. A. Nikolskii and G. I. Taganov. (*Prikladnaia Matematika i Mekhanika, Vol. 10, No. 4, 1946, pp. 481-502*) U.S., N.A.C.A., *Technical Memorandum No. 1213*, May, 1949. 45pp., 8figs., 6references.

An investigation carried out directly in the flow plane of the flow in a local supersonic region that is bounded by the contour of a body and by the transition line between the supersonic and the surrounding subsonic flow. The inclination of the body contour, at any point, is the arithmetic mean of the inclination of the velocity vectors of the flow at those loci on the transition line which coincide at the characteristic arising from the point. If the line of transition is not a discontinuity, the angle of inclination of the velocity vector along it varies monotonically. Along any portion of the contour that is a straight line, the velocity of the flow decreases. For profiles convex to the flow, the breakdown of potential flow that occurs when the Mach Number of the oncoming flow increases cannot be attributed to the formation of an envelope of the characteristics within the supersonic region. The monotonic variation of the velocity vector at the transition line is used to find the transitional Mach Number beyond which the potential flow, with a local supersonic region, becomes impossible and at which a shock wave arises.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

Taganov, G. I.

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ON THE RESISTANCE RELATED TO THE LIFTING FORCE PRODUCED IN SUPERSONIC FLOW. G. I. Taganov. Akad. Nauk S.S.S.R. Otdel. Tekh. Nauk 20, 383-94 (1956) May-June. (In Russian)

Comparative studies of the resistance related to the lifting force produced on two wings of the same span and equal lifting force (one optimal for incompressible flow with elliptic circulation distributed along the span, and the other optimal one with flat trapezoid wings for supersonic velocities) show that at equal thrust force velocities the wing in supersonic flow still has π times more resistance than the wing in incompressible flow. Analytical studies were carried out to determine if both types of wing resistance in supersonic flow are mechanically essential factors for producing the lifting force and comprise a part of parasitic resistance pertaining to the principles of gas dynamics. (R.V.J.)

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CARD 1/3 PG - 543

SUBJECT USSR/MATHEMATICS/Differential equations

AUTHOR RYZOV O.S., TAGANOV G.I.

TITLE The second limit case of the problem concerning high-powered explosions.

PERIODICAL Priklad.Mat.Mech. 20, 545-548 (1956)
reviewed 1/1957

The authors consider a punctiform high-powered explosion in an ideal gas, where the temperature of the gas is assumed to be variable with respect to time, however, not with respect to position. Only two of the determining constants are of independent dimension: E - is a magnitude which is proportional to the quantity of energy E_0 which has become free and ρ_0 is the initial density of the gas. This fact is used in order to bring the equations of the considered motion, according to Sedow's method, to the following form:

$$(1) \quad \frac{dV}{d\zeta} = -\frac{5V}{\zeta}\,\frac{(V-1)(5V-2)\zeta^2-15}{(5V-2)^2\zeta^2-25}, \qquad \frac{d\ln R}{d\zeta} = -\frac{5\left(3V+\frac{dV}{d\zeta}\right)}{\zeta(5V-2)}$$

under assumption of infinite efficiency. Here the velocity v of the particle and the density ρ depend on V and R, namely

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$$v = \frac{r}{t} V(\lambda), \quad \rho = \rho_0 R(\lambda), \quad \lambda = \frac{E}{\rho_0} \frac{t^2}{r^5} \text{ and } \zeta = \frac{1}{\sqrt{k_0}} \frac{1}{\lambda^{1/5}}.$$

As initial conditions for the integration of (1) the authors obtain

$$V_2 = \frac{2}{5(\alpha\varkappa+1)}; \quad R_2 = \frac{\alpha\varkappa+1}{\alpha\varkappa}; \quad \zeta_2 = \frac{5(\alpha\varkappa+1)}{2\sqrt{\alpha\varkappa}}$$

$\varkappa = \frac{c_p}{c_v}$, α - square of the Mach number behind the shock wave in a coordinate system which is connected with it. The magnitudes V_2, R_2 correspond to the velocity and the density behind the shock wave.
The integration of (1) has been carried out numerically, the integral lines for $V>0$, $\zeta>0$ are plotted on a diagram. The discussion of these solutions shows that the flow of the gas behind the considered wave front is similar to a flow under spherical detonation. The difference, however, lies in the fact that in the considered case the velocity of the particles behind the wave front is smaller than the velocity of sound.
Finally in the formula $E_0 = \beta(\varkappa)E$ the coefficient β is determined. The

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authors obtain the value 0,90 for $\varkappa = 1,2$ and the value 0,48 for $\varkappa = 1,4$. The results essentially deviate from Taylor's results for the opposite limit case (Proceedings of the Roy.Soc. 201, 159-174 (1950)).

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[illegible], G. [illegible].

"Total-pressure Losses in a System of Curved Shock Waves Situated Ahead of a Cascade Consisting of Flat Plates," Collection of Theoretical Papers in Aerodynamics, Moscow, Oborongiz, 1957.

This collection assembles a number of scientific reports, on theoretical aerodynamics, first printed in various publications between 1947 and 1952, and intended for research workers in advanced aerodynamics.

This report was first published in 1952. The magnitude of the total-pressure losses is determined for a system of curved shock waves situated ahead of a cascade of closely spaced flat plates. The losses are determined as functions of the angle of attack.

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TAGANOV, G. I.

Distr: 4E4f

920. Taganov, G. I., Drag due to lift in supersonic flow (in Russian), *Prikl. Mat. Mekh.* 20, 3, 382-394, May-June 1957.

Author reviews previous work on drag due to lift in subsonic incompressible and compressible flow. Purpose of the paper is attempt to show whether so-called wave and induced drags of supersonic flow are mechanically necessary to create lift and cannot be eliminated just as the corresponding drag for wings satisfying the Munk condition in incompressible fluid flow or for an ideal propeller in incompressible flow, or whether the parasitic drag is a part of the afore-mentioned supersonic drag. Three theorems are formulated: *Theorem 1.* At small angles of deflection of the stream from the lifting apparatus, the coefficient of the mechanically necessary or ideal drag is one-fourth the square of the lift coefficient if the nondimensional coefficients are obtained by referring the force to the area of the equivalent jet deflected by the lifting apparatus. *Theorem 2.* A wing-plate of infinite span in a supersonic flow has an additional parasitic drag equal in magnitude to the mechanically necessary or ideal drag when lift is created. *Theorem 3.* A lifting disk, which is a degenerate case of a wing cascade of arbitrary shape in a plane perpendicular to the direction of the unperturbed supersonic flow and is of zero thickness in the direction of the stream whose flow is isentropic and whose small angle of deflection is constant in the whole plane of the disk, does not have any parasitic drag in creating lift.

M. D. Friedman, USA

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TAGANOV, G. I. (Moscow)

"Generation of Aerodynamic Forces in Gases at Supersonic Speeds."

"On the Interaction of a Moving Shock Wave with a Thin Stationary Layer of Variable Density on a Solid Boundary."

reports presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

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NEYLAND, V.Ya. (Moskva); TAGANOV, G.I. (Moskva)

Forward stagnation point heat transfer for hypersonic flow. Inzh. zhur. 1 no.3:151-153 '61. (MIRA 15:2)
(Aerodynamics, Hypersonic)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754710014-1

NEYLAND, V.Ya. (Moskva); TAGANOV, G.I. (Moskva)

Characteristics of the flow in a stall zone. Inzh.zhur. 2 no.3:36-42 '62. (MIRA 15:8)
(Stalling (Aerodynamics))

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L 10628-63 EPA(b)/EWT(1)/BDS--AEDC/AFFTC/ASD--Pd-4--WW
ACCESSION NR: AP3000709 S/0258/63/003/002/0207/0214

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AUTHOR: Neyland, V. Ya. (Moscow); Taganov, G. I. (Moscow)

TITLE: On the configuration of forward separated flow regions in supersonic gas flow past bodies

SOURCE: Inzhenernyy zhurnal, v. 3, no. 2, 1963, 207-214

TOPIC TAGS: supersonic symmetrical flow, separated symmetrical flow, flow detection angle, separated flow parameter, laminar boundary layer

ABSTRACT: A detailed study of the configurations of forward separated flow regions in supersonic flow past symmetrical bodies is presented. The angle of flow separation is determined, and its dependence on Mach member is established for the case when the ratio of viscous boundary layer thickness on the boundary of a conical separated region near the reattachment point to the radius of body curvatures at the meridional cross section tends to zero. Calculations of the angle of separation in the case of flow past a cone and sphere with spikes at zero angle of attack, as well as in the case of flow past a cylinder with a flat plate, were carried out on a computer. The dependence of the angle of separation

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on the ratio of spike length to sphere diameter is established for a wide range of Mach numbers. The dependence of the angle of separation on the cone angle is also established. It is stated that the relationships obtained make it possible to determine the configuration of the separated flow region and the angle of flow separation for a given Mach number and separation point location for symmetrical bodies of arbitrary shape in supersonic flow at zero angle of attack. The results of calculations are given in graphs. Orig. art. has: 6 figures and 3 formulas.

ASSOCIATION: none

SUBMITTED: 12Dec62 DATE ACQ: 21Jun63 ENCL: 00

SUB CODE: AI NO REF SOV: 001 OTHER: 006

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