S. No.	Title of the Patent and Copyright	Authors	Filed/ Granted / Published	National/ International
1.	Sustainable Financial System Using IOT For Detection of Fake Links and Support Secure Transaction **Patent No.:202404715**	Murugesan Selvam Dr Gengatharan Ramesh Dr Anthonisamy Ananth Dr J M Velmurugan Dr Santanu Dasgupta D rAsik Rahaman Jamader Mr	Granted and Published	International (South Africa- Patent)

REPUBLIC OF SOUTH AFRICA

REPUBLIEK VAN SUID AFRIKA

PATENTS ACT, 1978

CERTIFICATE

In accordance with section 44 (1) of the Patents Act, No. 57 of 1978, it is hereby certified that:

DR. MURUGESAN SELVAM; DR. GENGATHARAN RAMESH; DR. ANTHONISAMY ANANTH; DR. J.M. VELMURUGAN; DR. SANTANU DASGUPTA; MR. ASIK RAHAMAN JAMADER

Has been granted a patent in respect of an invention described and claimed in complete specification deposited at the Patent Office under the number

2024/04715

A copy of the complete specification is annexed, together with the relevant Form P2.

In testimony thereof, the seal of the Patent Office has been affixed at Pretoria with effect from the 29th day of **January 2025**

.....

Registrar of Patents

PATENT JOURNAL

INCLUDING TRADE MARKS, DESIGNS AND COPYRIGHT IN CINEMATOGRAPH FILMS

AUGUST 2024 **VOL 57 ● No. 08**

Companies and Intellectual Property Commission

a member of the dtic group

Part II of II

ISSUED MONTHLY **DATE OF ISSUE: 28 AUGUST 2024**

ISSN 2223-4837

PATENT JOURNAL

INCLUDING TRADE MARKS, DESIGNS AND COPYRIGHT IN CINEMATOGRAPH FILMS

VOL. 57 No. 08 **Date of Issue: 28 AUGUST 2024**

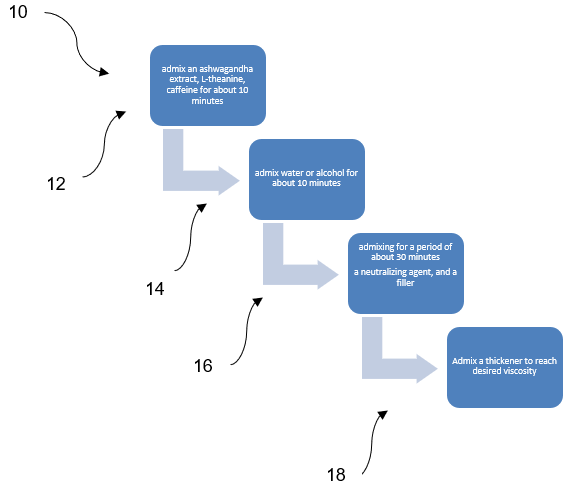
PATENTS, TRADE MARKS, DESIGNS AND COPYRIGHT OFFICE

Official notices of proceedings under:

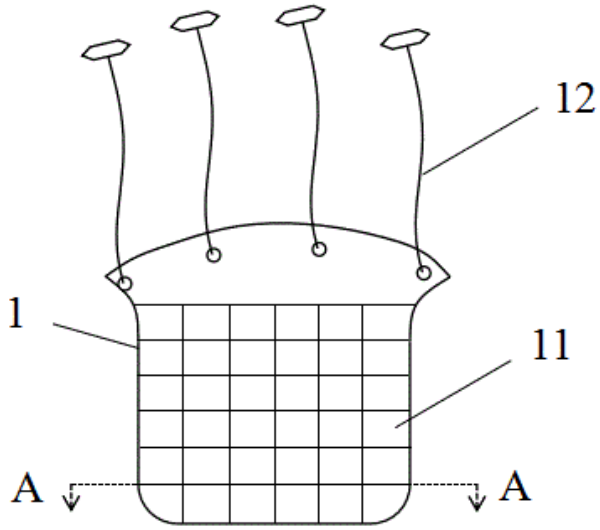
The Patents Act, 1978
The Designs Act, 1993
The Trade Marks Act, 1963
The Trade Marks Act, 1993
The Registration of Copyright in Cinematograph Films Act, 1977

Registrar of Patents, Trade Marks, Designs and Copyright

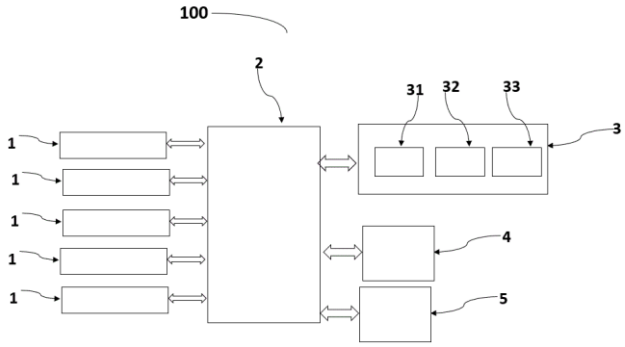
whilst elevating energy levels. The composition comprises a first plant extract from the flowering plant family Theaceae; a preparation of the methylxanthine class in a therapeutic effective amount to elevate energy levels; and an adaptogen formulated in a therapeutic effective amount to lower cortisol levels released by adrenal glands.



21: 2024/04714. 22: 2024/06/18. 43: 2024/12/24
51: C04B
71: Jingdezhen Ceramic University
72: Shi Jijun, Sun Guoliang
33: CN 31: 2023107260808 32: 2023-06-19
54: ZIRCONIA CERAMIC MICROBEAD AND PREPARATION METHOD THEREOF
00: -
The invention discloses a zirconia ceramic microbead and preparation method thereof, which belong to the technical field of ceramic materials. The green body of zirconia ceramic bead with a particle size of submillimeter is prepared by using the liquid phase method of gel casting of acrylamide system, and provides a ball core with suitable size for the invention; the in-situ precipitation of zirconia precursors Zr(OH)4 and Y(OH)3 is carried out on the surface of the zirconia ceramic microbead green body by using an in-situ immobilization method, and the zirconia ceramic microbead with the core-shell structure is formed by high-temperature calcination. Due to the high specific surface energy, high surface activity, and improved surface sintering performance of nano zirconia, the surface density of zirconia ceramic microbead is improved, leading to an improvement in their wear resistance.



21: 2024/04715. 22: 2024/06/18. 43: 2024/12/24
51: G06Q
71: Dr. Murugesan Selvam, Dr. Gengatharan Ramesh, Dr. Anthonisamy Ananth, Dr. J.M. Velmurugan, Dr. Santanu Dasgupta, Mr. Asik Rahaman Jamader
72: Dr. Murugesan Selvam, Dr. Gengatharan Ramesh, Dr. Anthonisamy Ananth, Dr. J.M. Velmurugan, Dr. Santanu Dasgupta, Mr. Asik Rahaman Jamader
54: SUSTAINABLE FINANCIAL SYSTEM USING IOT FOR DETECTION OF FAKE LINKS AND SUPPORT SECURE TRANSACTION
00: -
The present invention discloses a sustainable financial system using Internet of Things (IoT) devices for detecting fake links and supporting secure transactions. The system includes multiple IoT devices connected to a central processing unit, equipped with intelligent circuits for protection against electrical issues, and modules for link detection and secure transactions. The link detection module utilizes databases and deep learning algorithms to identify malicious content, while the secure transaction module ensures the legitimacy of links and alerts users of potential threats. The system enhances security in financial applications, integrating with existing platforms and providing real-time protection.

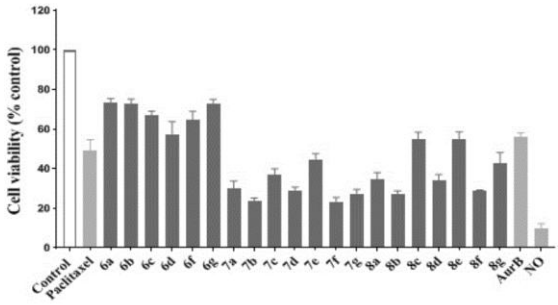


21: 2024/04717. 22: 2024/06/18. 43: 2024/12/24
51: C07K
71: ZHEJIANG CANCER HOSPITAL, ZHEJIANG UNIVERSITY OF TECHNOLOGY
72: FANG, Luo, ZHAN, Zhajun, ZHU, Junfeng, DING, Haiying, XIN, Wenxiu, WANG, Jiaqi, SONG, Yu

54: NO-S-S-AURB CONJUGATE AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present disclosure relates to an NO-S-S-AurB conjugate and a preparation method of the NO-S-S-AurB conjugate, and an application of the NO-S-S-AurB conjugate in drugs with anti-TNBC activity and selectivity, and belongs to the technical field of medicines. According to the present disclosure, the NO-S-S-AurB conjugate is synthesized based on a self-immolative strategy, a twin drug is prepared by combining a benzenesulfonylfuraxan nitric oxide (NO) donor and AurB, a plurality of NO-S-S-AurB conjugates are synthesized, and structures of the NO-S-S-AurB conjugates are determined through spectral characterization. The preparation method of the NO-S-S-AurB conjugate is provided, a route is reasonable, and the product is high in yield, convenient to separate and high in purity. Since tumour tissue has the characteristic of high glutathione (GSH) expression, anti-TNBC activity and selectivity of the mother drug AurB are significantly improved by means of GSH-sensitive disulfide-based self-immolative linkers of this series of NO-S-S-AurB conjugates.



21: 2024/04753. 22: 2024/06/19. 43: 2024/12/24
51: E21F
71: SUZHOU UNIVERSITY
72: HU, Ru, JIANG, Chuang, GUO, Xiaoyan, ZHAO, Mingkun, GUO, Yan

54: METHOD FOR IDENTIFYING AND PREVENTING WATER DISASTERS IN UNDERGROUND BED SEPARATION

00: -

The present invention relates to the recognition and prevention of types of water disasters in coal mines, specifically a method of identifying and preventing water disasters in underground bed separation, which comprises the following steps:determination of whether overlying rock layers in a gob have conditions to form bed separation water;classification of hazard classes of bed separation water;determination of location of a bed separation space;identification and probing of a bed separation space;calculation of the relationship between breakage of overburden rocks and periodic water inflow at the working face;Prevention and control of bed separation water. In the present invention, a “trapezoidal platform” model for the damage of overlying rock is applied to the positioning of a bed separation space for the first time, and a plate theory for the breakage of rock layers is introduced, which can more accurately predict a spatial development location of bed separation water and a water inflow law of bed separation water, and provides a more reliable basis for the management of bed separation water.