

TECHNOLOGY OFFER

ULTRA-VIOLET ABSORBING COMPOUNDS WITH ANTIMICROBIAL PROPERTIES

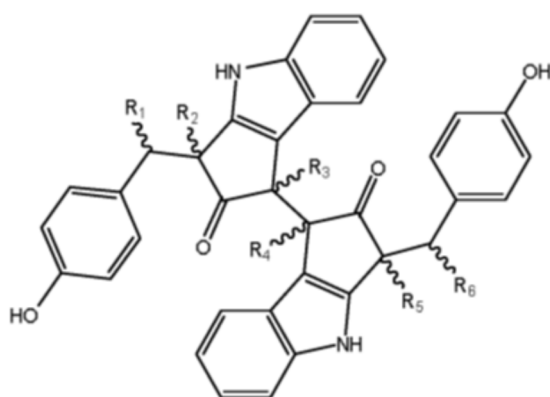
Background

Ultraviolet (UV) radiation is a harmful and mutagenic component, causing premature skin aging, eye damage, and skin cancer. In addition, blue-violet light may act as silent and long-term aging energy, causing inflammation, wrinkles, hyperpigmentation and others. There is a clear tendency for the development of broad range sun care products that can protect from UV-A, UV-B and blue-light.

Technology

The patent is related to scytonemin analogs, a novel class of compounds, obtained from natural sources, namely cyanobacteria. These compounds can absorb up to 90% of UV-A radiation and can cover a broader UV to blue light absorption range. The compounds present faint colouration, and some are even colourless, thus being easily incorporated in formulations for cosmetic products, sunscreens or lenses for sunglasses.

Furthermore, some of these molecules present interesting antimicrobial properties, acting as multifunctional ingredients.



Scytonemin Analogs Structure

Advantages

- UV-B, UV-A and blue light absorption (293 to 500 nm);
- Novel structure;
- Colorless or faint coloration;
- Antimicrobial and antioxidant properties.

PATENT STATUS

International Patent Application
via PCT WO2020128112
Priority date: 21.12.2018
Granted in US and China
Pending in Europe

DEVELOPMENT STAGE

TRL5 – Technology validated in relevant environment

Further development for validation in large scale setups required.

APPLICATIONS

Sunscreens;
Skin care products;
Eyewear lenses.

COOPERATION

Licensing agreement;
Product development and marketability;
Validation in large scale up setups.

KEYWORDS

UV-B protection
UV-A protection
Blue light protection
Antimicrobial
Scytonemin analogs
Natural Product

DEVELOPED BY

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