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(12) **United States Patent**  
**Petkoska et al.**

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(54) **ANTIOXIDANT COMPOSITIONS AND METHODS OF PROTECTING SKIN, HAIR AND NAILS AGAINST HIGH ENERGY BLUE-VIOLET LIGHT**

(58) **Field of Classification Search**  
CPC . A61K 8/922; A61K 2800/5922; A61Q 17/04  
See application file for complete search history.

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**Related U.S. Application Data**

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**A61K 8/9794** (2017.01)  
**A61Q 17/04** (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.**  
CPC ..... **A61K 8/922** (2013.01); **A61K 8/927** (2013.01); **A61K 8/9789** (2017.08); **A61K 8/9794** (2017.08); **A61Q 17/04** (2013.01); **A61K 2800/592** (2013.01); **A61K 2800/5922** (2013.01)

Compositions and methods of using them for protecting skin, hair and nails against exposure to high energy visible light are described. The compositions can include one or more natural oils or extracts which are effective to absorb the high energy visible light at least to some degree.

**16 Claims, 93 Drawing Sheets**

As Above Designated	US <3620mm	REV 459-445mm	REV 446-330mm
ferrous oil	200	2	
lauric oil	20		
yellow poupart oil	205	2	
helicoporus oil	206		
concomitant oil	208		
stearic oil	209	2	
potassium oleate	20	20	2
resiniferous oil	21		
olive oil	21		
one fourth oil	21	20	20
essential oil	202	20	2
red raspberry oil	205	20	2
acacia berry oil	20	20	
nutmeg oil	206	20	
sesame oil	207	20	2
avocado oil	207	2	
hazelnut oil	21	2	
madagascar oil	21	2	
hemp seed oil	21	20	20
nut oil	21	20	20
marula oil	202	20	2
lavender oil	2	20	20
coconut oil	200	20	20
potassium oleate	20	20	2
extra virgin olive oil (EVOO)	20	20	20
wild germ oil	20	20	20
carrot seed oil	20	20	2
olive vera oil	20	2	
sunflower oil	207	20	20
jojoba oil	205	20	2
apricot seed oil	20	20	20
Egyptian persea nut oil	200	2	
sunflower oil	2		
argan oil	20	20	20
racemate oil	20	2	
beeswax oil	2	20	20
olive oil	200	20	20
cranberry oil	20	20	20
frankincense oil	20	20	20
ginseng oil	20	20	20
hazelnut oil	20	2	
nut oil	20	20	20
black walnut oil	20	20	20
grapeseed oil	20	20	20
olive seed oil	20	20	2
orange seed oil	20	20	20
orange oil	20	20	20
St John's wort/olive oil	20	20	2
black lupine oil	20	20	20
beeswax	20	20	20