

## JCW Patents – Cosmetics and Personal Care

**6 Inventions Families 10 Patent Families 42 Patents**  
**(As of December 16, 2022)**

### **011 Thymine Photopolymers for Hair Shaping (2002-12-20)**

#### **018 Photoreactive Polymers and Devices for use in Hair Treatments**

John C. Warner, Amy S. Cannon, Jennifer Raudys and Arundhati Undurti

- 051 [US 7,550,136](#) Granted 2009-06-23, Published 2004-10-21, Filed 2003-12-19
- 052 [WO 2004/058187](#) Published 2004-07-15, Filed 2003-12-22
- 053 [AU 2003/297535](#) Granted 2009-12-03, Published 2004-07-22, Filed 2003-12-22
- 054 [CA 2510162](#) Published 2004-07-15, Filed 2003-12-22
- 055 [EP 1575537](#) Published 2005-09-21, Filed 2003-12-22
- 056 [JP 2006/514037](#) Published 2006-04-27, Filed 2003-12-22

### **014 Enzymatic Hair Coloring System (2009-11-13)**

#### **021 Color Composition Containing an Aromatic Compound and Tyrosinase**

John C. Warner and Emily J. Stoler

- 062 [US 2011/0113571](#) Published 2011-05-19, Filed 2010-11-15
- 063 [WO 2011/060351](#) Published 2011-05-19, Filed 2010-11-15
- 064 [CN 102695495](#) Published 2012-09-26, Filed 2010-11-15

#### **022 Coloring Composition Containing an Aromatic Compound and Forming a Non-Covalent Derivatization Complex**

John C. Warner and Emily J. Stoler

- 065 [US 2011/0113573](#) Published 2011-05-19, Filed 2010-11-15

#### **023 Coloring Composition Containing L-Dopa and L-Arginine and Forming a Noncovalent Derivatization Complex**

John C. Warner and Emily J. Stoler

- 066 [US 8,118,880](#) Granted 2012-02-21, Published 2012-02-21, Filed 2010-11-15
- 067 [WO 2012/067868](#) Published 2012-05-24, Filed 2011-11-07

#### **024 Hair Coloring Composition Containing an Aromatic Compound and an Initiator**

John C. Warner and Emily J. Stoler

- 068 [US 8,231,689](#) Granted 2012-07-31, Published 2012-07-31, Filed 2010-11-15
- 069 [WO 2011/060354](#) Published 2011-05-19, Filed 2010-11-15
- 070 [EP 2501374](#) Published 2012-09-26, Filed 2010-11-15
- 071 [JP 2013/510880](#) Published 2013-03-28, Filed 2010-11-15

### **018 Catalytic Hair Coloring (2011-09-02)**

#### **031 Formulation and Method for Hair Dyeing**

John C. Warner and Michael S. Viola

- 105 [US 8,366,791](#) Granted 2013-02-05, Published 2013-02-05, Filed 2011-09-02

### **025 Non-Toxic, Biomimetic, Hair Color Restoration (2013-10-14)**

#### **042 Formulation and Processes for Hair Coloring**

John C. Warner, Laura Muollo and Amie Stewart

- 132 [US 8,828,100](#) Granted 2014-09-09, Published 2014-09-09, Filed 2013-10-14
- 133 [WO 2015/057254](#) Published 2015-04-23, Filed 2014-01-25
- 134 [AU 2014/337395](#) Granted 2019-10-10, Published 2016-05-26, Filed 2014-01-25
- 135 [BR 10/2014/025546](#) Published 2015-10-27, Filed 2014-10-14
- 136 [CN 105792797](#) Granted 2020-10-16, Published 2016-07-20, Filed 2014-01-25
- 137 [EP 3057561](#) Published 2016-08-24, Filed 2014-01-25
- 138 [IL 245082](#) Published 2016-06-30, Filed 2016-04-13
- 139 [IN 2016/37015550](#) Published 2016-08-26, Filed 2016-04-05

- 140 [JP 6449269](#) Granted 2019-01-09, Published 2016-10-27, Filed 2014-01-25  
141 [KR 102159280](#) Granted 2020-09-23, Published 2016-06-15, Filed 2014-01-25  
142 NZ 719935. Published 2019-01-24, Filed 2016-05-11  
143 [ZA 2016/03186](#) Published 2017-08-20, Filed 2016-05-11

**043 Formulation and Processes for Hair Coloring, Continuation**

John C. Warner, Laura Muollo and Amie Stewart

- 144 [US 9,522,102](#) Granted 2016-12-20, Published 2016-06-30, Filed 2014-09-09

**035 Improved Hair Dyeing with Biopolymers (2015-12-30)**

**064 Aqueous Hair Dyeing Compositions Comprising Poly(lactic acid)**

Juliana Carvalhaes Lago, Adriana de Andrade Fregonesi, Carla Maria Sanches Scanavez de Paula, Ana Paula Pedroso De Oliveira, John C. Warner, Laura Muollo and Jennifer Cookson

- 219 [US 10,500,149](#) Granted 2019-12-10, Published 2017-07-06, Filed 2015-12-30  
220 [WO 2017/112999](#) Published 2017-07-06, Filed 2016-12-29  
221 [AR 107239](#) Published 2018-04-11, Filed 2016-12-28  
222 [AU 2016/379964](#) Published 2018-07-19, Filed 2016-12-29  
223 [BR 11/2018/013359](#) Published 2018-12-04, Filed 2016-12-29  
224 [CL 2018/001800](#) Published 2018-12-21, Filed 2018-06-29  
225 [EP 3397237](#) Published 2018-11-07, Filed 2016-12-29  
226 [JP 6927998](#) Granted 2021-09-01, Published 2019-03-28, Filed 2016-12-29  
227 [KR 2018/0123010](#) Published 2018-11-14, Filed 2016-12-29  
228 [MX 2018/008138](#) Published 2018-11-09, Filed 2016-12-29

**050 Polyelectrolyte Core-Shell Microcapsules (2020-11-25)**

**090 Core-Shell Microcapsules Comprising Polyelectrolytes for Personal Care Compositions**

Justin Whitfield, John C. Warner and Richard F. Kearney

- 337 US 63/118,124. Filed 2020-11-25. Unpublished  
338 [WO 2022/112204](#) Published 2022-06-02, Filed 2021-11-23