

# (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2022/0353967 A1 BEIJ et al.

Nov. 3, 2022 (43) **Pub. Date:** 

### (54) A LIGHT EMITTING DIODE, LED, BASED LIGHTING DEVICE ARRANGED TO EMIT COLORED LIGHT AS WELL AS A CORRESPONDING METHOD FOR OPERATING SUCH A LED BASED LIGHTING DEVICE

## (71) Applicant: SIGNIFY HOLDING B.V., EINDHOVEN (NL)

## (72) Inventors: Marcel BEIJ, EINDHOVEN (NL); Eugen Jacob DE MOL, EINDHOVEN (NL); Henricus Marius Joseph Maria KAHLMAN, EINDHOVEN (NL)

### (22) PCT Filed: Sep. 28, 2020

#### (86) PCT No.: PCT/EP2020/077106

§ 371 (c)(1),

Mar. 17, 2022 (2) Date:

### (30)Foreign Application Priority Data

Oct. 3, 2019 (EP) ...... 19201231.8

### **Publication Classification**

(51) Int. Cl. H05B 45/20 (2006.01)H05B 45/325 (2006.01)H05B 45/46 (2006.01)

(52)U.S. Cl. CPC ...... H05B 45/20 (2020.01); H05B 45/325 (2020.01); H05B 45/46 (2020.01)

#### (57)**ABSTRACT**

A Light Emitting Diode, LED, based lighting device arranged to emit colored light, wherein said LED based lighting device comprises a first LED channel comprising at least one LED arranged for emitting light at a first color, a second LED channel comprising at least one LED arranged for emitting light at a second color, said second color being different to said first color, a controller arranged for activating said first LED channel and said second LED channel based on a color ratio such that said LED based lighting device emits light having a particular color, wherein said controller is further arranged for correcting said color ratio based on aging of said at least one LED in said first LED channel and on said at least one LED in said second LED channel, thereby ensuring color consistency of said particular color of said LED based lighting device over time.

