



US 20230230768A1

(19) **United States**(12) **Patent Application Publication****Jun et al.**(10) **Pub. No.: US 2023/0230768 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **MULTILAYER ELECTRONIC COMPONENT****H01G 4/30** (2006.01)**C04B 35/468** (2006.01)(71) Applicant: **SAMSUNG ELECTRO-MECHANICS CO., LTD.**, Suwon-si (KR)(72) Inventors: **Ho In Jun**, Suwon-si (KR); **Kyeong Jun Kim**, Suwon-si (KR); **Mi Kyeong Kim**, Suwon-si (KR); **Eon Ju Noh**, Suwon-si (KR); **Hye Won Ryoo**, Suwon-si (KR)(73) Assignee: **SAMSUNG ELECTRO-MECHANICS CO., LTD.**, Suwon-si (KR)(21) Appl. No.: **18/084,075**(22) Filed: **Dec. 19, 2022**(30) **Foreign Application Priority Data**

Jan. 19, 2022 (KR) ..... 10-2022-0007749

**Publication Classification**(51) **Int. Cl.**  
**H01G 4/12** (2006.01)  
**H01G 4/008** (2006.01)  
**H01G 4/248** (2006.01)  
**H01G 4/232** (2006.01)(52) **U.S. Cl.**  
**CPC** ..... **H01G 4/1227** (2013.01); **C04B 35/4682** (2013.01); **H01G 4/008** (2013.01); **H01G 4/30** (2013.01); **H01G 4/248** (2013.01); **H01G 4/2325** (2013.01); **C04B 2235/3224** (2013.01); **C04B 2235/3236** (2013.01)(57) **ABSTRACT**

A multilayer electronic component includes: a body including a plurality of dielectric layers and internal electrodes disposed to face each other with each of the plurality of dielectric layers interposed therebetween; and external electrodes connected to the internal electrodes and disposed on outer surfaces of the body, wherein each of the plurality of dielectric layers includes a BaTiO<sub>3</sub>-based base material main component and an accessory component including dysprosium (Dy) and terbium (Tb), a content of terbium (Tb) is 0.2 mol or more and less than 1.0 mol based on 100 mol of the base material main component, and the dielectric layer includes a plurality of dielectric crystal grains having a particle size of 60 nm or more and 250 nm or less at a point (D50) at which a cumulative volume is 50% in a cumulative particle size distribution according to a particle size distribution system.

