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(54) **METHOD FOR PREPARING  
SULFIDE-BASED SOLID ELECTROLYTE,  
SULFIDE-BASED SOLID ELECTROLYTE  
PREPARED BY THE METHOD AND  
ALL-SOLID-STATE LITHIUM SECONDARY  
BATTERY INCLUDING THE  
SULFIDE-BASED SOLID ELECTROLYTE**

(71) Applicant: **SOLIVIS INC.**, Seoul (KR)

(72) Inventors: **Dong Wook SHIN**, Seongnam-si (KR);  
**Min Yong EOM**, Seoul (KR); **Seung  
Hyun OH**, Hanam-si (KR); **Chan Hwi  
PARK**, Seoul (KR); **Sun Ho CHOI**,  
Incheon (KR)

(73) Assignee: **SOLIVIS INC.**, Seoul (KR)

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(57) **ABSTRACT**

Provided are a method for preparing a sulfide-based solid electrolyte, a sulfide-based solid electrolyte prepared by the method, and an all-solid-state lithium secondary battery including the sulfide-based solid electrolyte. The method includes a) mixing  $\text{Li}_2\text{S}$  with  $\text{P}_2\text{S}_5$  to prepare a mixed powder, b) placing the mixed powder, an ether, and stirring balls in a container, sealing the container, followed by stirring to prepare a suspension, and c) stirring the suspension under high-temperature and high-pressure conditions to prepare sulfide-based solid particles.

