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IKENAGA et al.(10) **Pub. No.: US 2024/0237523 A1**(43) **Pub. Date: Jul. 11, 2024**(54) **DEUTERIDE AND ORGANIC
ELECTROLUMINESCENT ELEMENT****C09K 11/06** (2006.01)**H10K 50/12** (2006.01)(71) Applicant: **NIPPON STEEL CHEMICAL &
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(JP); **Yuya SHIMAMOTO**, Tokyo (JP)(52) **U.S. Cl.****CPC** **H10K 85/6572** (2023.02); **C07D 209/86**
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50/12 (2023.02); **H10K 2101/90** (2023.02)(73) Assignee: **NIPPON STEEL CHEMICAL &
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To provide a practically useful organic EL device having a low driving voltage and also having a high efficiency and a long lifetime, and a deuteride suitable therefor. A deuteride of a compound represented by the following general formula (1), in which a rate of deuteration of hydrogen atoms on aromatic rings in Ar¹ and Ar² in a compound represented by the following general formula (1) is 40% or more, wherein Ar¹ and Ar² each independently represent a substituted or unsubstituted aromatic hydrocarbon group having 6 to 30 carbon atoms, or a substituted or unsubstituted linked aromatic group in which two to five of these aromatic rings are linked to each other, and aromatic hydrocarbon groups in the case of these aromatic rings linked are the same as or different from each other.

