



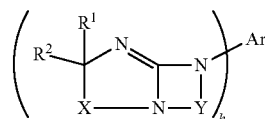
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(19) **United States**(12) **Patent Application Publication**
TAKABATAKE et al.(10) **Pub. No.: US 2024/0237526 A1**(43) **Pub. Date: Jul. 11, 2024**(54) **ORGANIC COMPOUND, LIGHT-EMITTING
DEVICE, LIGHT-EMITTING APPARATUS,
AND ELECTRONIC DEVICE**(71) Applicant: **SEMICONDUCTOR ENERGY
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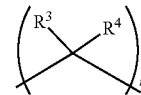
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(2013.01); **C09K 11/06** (2013.01); **H10K**
85/624 (2023.02); **C09K 2211/1018** (2013.01);
H10K 50/171 (2023.02)(57) **ABSTRACT**An electron-injection organic compound with low solubility
in water is provided. An organic compound represented by

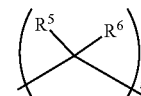
General Formula (G1) is provided. X represents a group represented by General Formula (X-1) and Y represents a group represented by General Formula (Y-1). Ar represents a heteroaromatic hydrocarbon group having 2 to 30 carbon atoms forming a ring or an aromatic hydrocarbon group having 6 to 30 carbon atoms forming a ring. Each of R¹ and R² independently represents hydrogen or an alkyl group having 1 to 6 carbon atoms, and h represents an integer of 1 to 6. In General Formulae (X-1) and (Y-1), each of R³ to R⁶ independently represents hydrogen or an alkyl group having 1 to 6 carbon atoms, and m represents an integer of 0 to 4. When m is 0, 1, 3, or 4, n represents an integer of 1 to 5. When m is 2, n represents 1, 2, 4, or 5.



(G1)



(X-1)



(Y-1)

