5

20

30

40

-continued

(Rb₂)n₂

$$(Rb_2)n_2$$

$$\bigcap_{O}^{(\mathsf{Rb}_2)n_2}$$

$$(Rb_2)n_2$$

$$(Rb_2)n_2$$

$$(Rb_2)n_2$$
 $(Rb_2)n_2$

-continued

$$(Rb_2)n_2$$

$$(Rb_2)n_2$$

LC1-5 10

LC1-14

25 LC1-7 (Rb₂)n₂

LC1-15
LC1-8 35

LC1-16 LC1-9 $(Rb_2)n_2$

The presence of a substituent (Rb₂) on the portion of the 50 lactone structure is optional. As a preferred substituent (Rb₂), LC1-10 there can be mentioned an alkyl group having 1 to 8 carbon atoms, a cycloalkyl group having 4 to 7 carbon atoms, an alkoxy group having 1 to 8 carbon atoms, an alkoxycarbonyl group having 1 to 8 carbon atoms, a carboxyl group, a halogen 55 atom, a hydroxyl group, a cyano group, an acid-decomposable group or the like. Of these, an alkyl group having 1 to 4 carbon atoms, a cyano group and an acid-decomposable group are more preferred. In the formulae, n_2 is an integer of LC1-11 0 to 4. When n₂ is 2 or greater, the plurality of present substituents (Rb₂) may be identical to or different from each other. Further, the plurality of present substituents (Rb₂) may be bonded with each other to thereby form a ring.

As the repeating units with a lactone structure represented by any of the general formulae (LC1-1) to (LC1-16), there can be mentioned the repeating units represented by the following general formula (AII).