(AL-3)-7

-continued

(AL-2)-77

$$-\text{CH}_{3} \\ -\text{CH} - \text{O} - \text{CH}_{2}\text{CH}_{2}\text{O} \\ -\text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{OCH}_{2}\text{CH}_{2} \\ -\text{O} - \text{CH}_{2} \\ -\text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{CH}_{4} \\ -\text{O} - \text{CH}_{2}\text{CH}_{2} \\ -\text{O} - \text{CH}_{2}\text{CH}_{2} \\ -\text{O} - \text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{CH}_{3} \\ -\text{CH}_{4} \\ -\text{O} - \text{CH}_{5} \\ -\text{CH}_{5} \\ -\text{$$

[0087] In formula (AL-3),  $R^{L5}$ ,  $R^{L6}$  and  $R^{L7}$  are each independently a  $C_1$ - $C_{20}$  hydrocarbyl group which may contain a heteroatom such as oxygen, sulfur, nitrogen or fluorine. The hydrocarbyl group may be saturated or unsaturated and straight, branched or cyclic. Examples thereof include  $C_1$ - $C_{20}$  alkyl groups and  $C_2$ - $C_{20}$  alkenyl groups. A pair of  $R^{L5}$  and  $R^{L6}$ ,  $R^{L5}$  and  $R^{L7}$ , or  $R^{L6}$  and  $R^{L7}$  may bond together to form a  $C_3$ - $C_{20}$  aliphatic ring with the carbon atom to which they are attached.

[0088] Examples of the group having formula (AL-3) include tert-butyl, 1,1-diethylpropyl, 1-ethylnorbornyl, 1-methylcyclohexyl, 1-methylcyclopentyl, 1-ethylcyclopentyl, 2-(2-methyl)adamantyl, 2-(2-ethyl)adamantyl, and tertpentyl.

[0089] Examples of the group having formula (AL-3) also include groups having the formulae (AL-3)-1 to (AL-3)-18.

$$\mathbb{R}^{L14}$$

$$\begin{array}{c|c} R^{L14} & R^{L15} \end{array}$$

$$\begin{array}{c|c}
R^{L14} & R^{L15}
\end{array}$$

$$\begin{array}{c|c}
R^{L14} \\
R^{L16}
\end{array}$$
(AL-3)-5

$$\begin{array}{c}
\mathbb{R}^{L14} \\
\mathbb{R}^{L15}
\end{array}$$

-continued

$$\begin{array}{c} R^{L14} \\ R^{L15} \\ \end{array}$$

$$\begin{array}{c} \mathbb{R}^{L14} & \mathbb{R}^{L15} \\ \mathbb{R}^{L17} \end{array}$$

$$(AL-3)-10$$

$$(AL-3)-12$$

$$R^{L14}$$

$$(AL-3)-13$$

$$\begin{bmatrix} R^{L14} \\ R^{L14} \end{bmatrix}$$