In chemical equations, free radicals are frequently denoted by a dot placed immediately to the right of the atomic symbol or molecular formula as follows:

$$\operatorname{Cl}_2 \xrightarrow{UV} \operatorname{Cl} + \operatorname{Cl} \cdot$$

Chlorine gas can be broken down by ultraviolet light to form atomic chlorine radicals.

It was step of Initiation. Initiation reactions are those that result in a net increase in the number of free radicals. They may involve the formation of free radicals from stable species as in Reaction 1 above or they may involve reactions of free radicals with stable species to form more free radicals.

Next step: Propagation reactions are those reactions involving free radicals in which the total number of free radicals remains the same. I your case it is :

 $\begin{array}{rl} (CH_3)_3C\text{-}H + \cdot Cl \rightarrow (CH3)3C \cdot + HCl \\ (CH3)3C \cdot + Cl\text{-}Cl \rightarrow (CH_3)_3C\text{-}Cl + \cdot Cl \end{array}$