

$$\begin{aligned}
& (\boxtimes((AdultF_{John} \leftrightarrow AdultP_{John}) \wedge \\
& (PersonF_{John} \leftrightarrow PersonP_{John}) \wedge \\
& (AdultF_{John} \rightarrow PersonF_{John}) \wedge \\
& (MinorF_{John} \leftrightarrow MinorP_{John}) \wedge \\
& \neg(MinorF_{John} \wedge \\
& AdultF_{John}) \wedge \\
& (AdultF_{John} \rightarrow DIAMOND0F_{John}) \wedge \\
& \Box_F((DIAMOND1P_{John} \leftrightarrow \Diamond_F MinorP_{John}) \wedge \\
& (\Box_F DIAMOND0F_{John} \leftrightarrow (\Box_F MinorF_{John} \vee DIAMOND0F_{John}))) \wedge \\
& (DIAMOND0F_{John} \leftrightarrow DIAMOND1P_{John}) \wedge \\
& (MinorF_{John} \rightarrow PersonF_{John})) \wedge \\
& MinorF_{John})
\end{aligned}$$