

$$\begin{array}{ccccccc}
\pi & & \pi' & & & & \\
\widetilde{d} & & d^\# & & d^{\#'} & & \sigma_\omega \\
\sigma_{\omega,1} & & \sigma_{\omega,2} & & \sigma_{\omega,3} & \sigma_{\omega,4} & \sigma_{\omega,5} \\
\sigma'_{\omega,1} & & \sigma'_{\omega,2} & & \sigma'_{\omega,4} & & \\
\tau_\omega & & \tau^\# & & & & \\
\llbracket \pi \rightarrow \pi' \rrbracket^\# & & & & & & \\
\rightsquigarrow_\omega & & & & & & \\
\sqcup & & & & & & \\
\text{checker}(\sigma_\omega) & \neg & \text{checker}(\sigma_\omega) & & & &
\end{array}$$