

dependent-pair-inherence^{0,22}

$\forall A:\text{Type}, B:(A \rightarrow \text{Type}), eq:\text{EqDecider}(A), x:A, y:B(x), a:\text{Atom1}.$
 $\text{AtomFree}(\text{Type};A)$
 $\Rightarrow \text{AtomFree}(A \rightarrow \text{Type};B)$
 $\Rightarrow (\forall x:A. \text{AtomFree}(A;x))$
 $\Rightarrow \text{AtomFree}(\text{EqDecider}(A);eq)$
 $\Rightarrow y:B(x) \gg a$
 $\Rightarrow \langle x, y \rangle : x:A \times B(x) \gg a$