Inference at $*$ 1
of proof for Lemma decidable_atom_equal:

1. a : Atom
2. b : Atom
$\vdash$ $(a = b) \vee (\neg(a = b))$
by UseWitness if a=b then inl Ax else (inr $(\lambda x.x)$)

1:

$\vdash$ if a=b then inl Ax else (inr $(\lambda x.x)$) $\in$ $((a = b) \vee (\neg(a = b)))$
.