dec_iff_ex_bvfun[12,41]

$\forall T$:Type, E:($T \to T \to \mathbb{P}$).
$(\forall x, y{:}T.\ \mathrm{Dec}(E(x,y))) \iff (\exists f{:}T \to T \to \mathbb{B}.\ (\forall x, y{:}T.\ (\uparrow(x\ f\ y)) \iff E(x,y)))$

ProofTree

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http://www.nuprl.org/FDLcontent/p0_942988_/p15_4648_{dec_iff_ex_bvfun}.html