Inference at $*$ 1 1 0
of proof for Lemma connex_functionality_wrt_iff:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. R' : $T \to T \to \mathbb{P}$
4. $\forall x, y{:}T.\ R(x,y) \iff R'(x,y)$

$\vdash$ $(\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)) \iff (\forall x, y{:}T.\ R'(x,y) \vee R'(y,x))$
by PERMUTE{1:n, 2:n, 3:n, 4:n, 5:n, 1:n, 2:n, 3:n, 4:n, 5:n}

1: . . . . .wf. . . . . NILNIL

5. $\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)$
6. x : T
7. T

$\vdash$ $x \in T$

2: . . . . .wf. . . . . NILNIL

5. $\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)$
6. T
7. y : T

$\vdash$ $y \in T$

3: . . . . .wf. . . . . NILNIL

5. $\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)$
6. T

$\vdash$ $T \in$ Type

4: . . . . .wf. . . . . NILNIL

5. $\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)$

$\vdash$ $T \in$ Type

5: . . . . .wf. . . . . NILNIL

$\vdash$ $(\forall x, y{:}T.\ R'(x,y) \vee R'(y,x)) \in \mathbb{P}$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_80569_{connex_functionality_wrt_iff}1_1_0.html