t25_parsp_1 (TMNhm-ckS8kqkk2yN1W4RoGDU9CGJQsL8Cym)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_parsp\_1 : \iota \Rightarrow o$ be given. Let $l1\_parsp\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_parsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_parsp\_1\ X0) \wedge (l1\_parsp\_1\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (r1\_parsp\_1\ X0\ X1\ X1\ X2\ X3)))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_parsp\_1\ X0) \wedge (l1\_parsp\_1\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (r1\_parsp\_1\ X0\ X1\ X2\ X1\ X2))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_parsp\_1\ X0)) \Rightarrow ((v2\_parsp\_1\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X6.(m1\_subset\_1\ X6\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X7.(m1\_subset\_1\ X7\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X8.(m1\_subset\_1\ X8\ (u1\_struct\_0\ X0)) \Rightarrow ((r1\_parsp\_1\ X0\ X1\ X2\ X2\ X1) \wedge ((r1\_parsp\_1\ X0\ X1\ X2\ X3\ X3) \wedge ((\neg (r1\_parsp\_1\ X0\ X1\ X2\ X5\ X6) \wedge ((r1\_parsp\_1\ X0\ X1\ X2\ X7\ X8) \wedge ((\neg r1\_parsp\_1\ X0\ X5\ X6\ X7\ X8) \wedge (X1 \neq X2)))) \wedge (((r1\_parsp\_1\ X0\ X1\ X2\ X1\ X3) \Rightarrow (r1\_parsp\_1\ X0\ X2\ X1\ X2\ X3)) \wedge (\exists X9.(m1\_subset\_1\ X9\ (u1\_struct\_0\ X0)) \wedge ((r1\_parsp\_1\ X0\ X1\ X2\ X3\ X9) \wedge (r1\_parsp\_1\ X0\ X1\ X3\ X2\ X9)))))))))))))) \tag{3}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_parsp\_1\ X0)\wedge(l1\_parsp\_1\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow((\neg(X1\neq X2)\wedge((X3\neq X4)\wedge((\neg(X1=X3)\wedge(X2=X4))\wedge(\neg(X1=X4)\wedge(X2=X3)))))\Rightarrow(r1\_parsp\_1\ X0\ X1\ X2\ X3\ X4))))))$$