l23_scm_inst (TMUitvBqL1wkXoi1Nke425hnuvMcD6fqRt6)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_compos\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_scm\_inst : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $np\_\_4 : \iota$ be given. Let $np\_\_5 : \iota$ be given. Let $k3\_compos\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_compos\_0 : \iota \Rightarrow o$ be given. Let $k2\_compos\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_scm\_inst : \iota$ be given. Let $k5\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_compos\_0 : \iota \Rightarrow o$ be given. Let $v4\_funct\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$np\_\_1 = k1\_tarski\ k1\_xboole\_0 \tag{1}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (v1\_compos\_0\ X0)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_compos\_0\ X0)) \Rightarrow (\exists X2.(m1\_subset\_1\ X2\ X0) \wedge (k2\_compos\_0\ X0\ X2 = X1))) \tag{2}$$

Assume the following.

$$k1\_scm\_inst = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\neg(X0 \neq k1\_tarski\ k1\_xboole\_0) \wedge ((k1\_xboole\_0 \in X0) \wedge (\forall X1.\neg(X1 \in X0) \wedge (X1 \neq k1\_xboole\_0)))) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k3\_scm\_inst) \Rightarrow ((\neg(k2\_compos\_0\ k3\_scm\_inst\ X0 \neq np\_\_1) \wedge ((k2\_compos\_0\ k3\_scm\_inst\ X0 \neq np\_\_2) \wedge ((k2\_compos\_0\ k3\_scm\_inst\ X0 \neq np\_\_3) \wedge ((k2\_compos\_0\ k3\_scm\_inst\ X0 \neq np\_\_4) \wedge (k2\_compos\_0\ k3\_scm\_inst\ X0 \neq np\_\_5))))) \Rightarrow (k5\_xtuple\_0\ X0 = k1\_xboole\_0)) \tag{5}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k3\_scm\_inst) \wedge (v2\_compos\_0\ k3\_scm\_inst) \tag{6}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k3\_scm\_inst)\wedge(v1\_compos\_0\ k3\_scm\_inst) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1\_xboole\_0\ X0)\wedge(v1\_compos\_0\ X0))\wedge (m1\_subset\_1\ X1\ (k1\_compos\_0\ X0)))\Rightarrow((\neg v1\_xboole\_0\ (k3\_compos\_0\ X0\ X1))\wedge(v4\_funct\_1\ (k3\_compos\_0\ X0\ X1))) \tag{8}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v1\_compos\_0\ X0))\Rightarrow(\forall X1. (m1\_subset\_1\ X1\ (k1\_compos\_0\ X0))\Rightarrow(k3\_compos\_0\ X0\ X1 = ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ X0))\ (\lambda X2 : \iota.k2\_compos\_0\ X0\ X2 = X1)\ (\lambda X2 : \iota.k5\_xtuple\_0\ X2))) \tag{9}$$

Assume the following.

$$k1\_xboole\_0 = the\ (\lambda X0 : \iota.v1\_xboole\_0\ X0) \tag{10}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_compos\_0\ k3\_scm\_inst))\Rightarrow((\neg(X0\neq np\_\_1)\wedge((X0\neq np\_\_2)\wedge((X0\neq np\_\_3)\wedge((X0\neq np\_\_4)\wedge(X0\neq np\_\_5)))))\Rightarrow (k3\_compos\_0\ k3\_scm\_inst\ X0 = k1\_tarski\ k1\_xboole\_0))$$