t147_finseq_3 (TMJLcDQHMDxyUw-prU6Kspck5aGmk8gk3eUu)

October 27, 2020

Let $k8\_funct\_6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$(k2\_finseq\_1\ np\_\_1 = k1\_tarski\ np\_\_1) \wedge (k2\_finseq\_1\ np\_\_2 = k2\_tarski\ np\_\_1\ np\_\_2) \tag{1}$$

Assume the following.

$$\forall X0.k9\_finseq\_1\ X0 = k5\_finseq\_1\ X0 \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ (k5\_finseq\_1\ X0)) \wedge (v1\_funct\_1\ (k5\_finseq\_1\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((X2 = k8\_funct\_6\ X0\ X1) \Leftrightarrow ((k9\_xtuple\_0\ X2 = k9\_xtuple\_0\ X0) \wedge (\forall X3.(X3 \in k9\_xtuple\_0\ X0) \Rightarrow (k1\_funct\_1\ X2\ X3 = k1\_funct\_2\ (k1\_funct\_1\ X0\ X3)\ X1))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow ((X1 = k9\_finseq\_1\ X0) \Leftrightarrow ((k9\_xtuple\_0\ X1 = k2\_finseq\_1\ np\_\_1) \wedge (k1\_funct\_1\ X1\ np\_\_1 = X0))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \tag{6}$$

Theorem 1

$$\forall X0.\forall X1.k8\_funct\_6\ (k9\_finseq\_1\ X0)\ X1 = k9\_finseq\_1\ (k1\_funct\_2\ X0\ X1)$$