t8_finseq_7 (TML8v9Kzc2ejyLcVXrpC8nw79UeTAhuadTy)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_finseq\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(v7\_ordinal1\ X3) \Rightarrow (k3\_finseq\_1\ (k1\_finseq\_7\ X0\ X1\ X3\ X2) = k3\_finseq\_1\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.\forall X2.(m2\_finseq\_1\ X2\ X1) \Rightarrow (((r1\_xxreal\_0\ np\_\_1\ X0) \wedge (r1\_xxreal\_0\ X0\ (k3\_finseq\_1\ X2))) \Rightarrow (k7\_partfun1\ X1\ X2\ X0 = k1\_funct\_1\ X2\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(v7\_ordinal1\ X3) \Rightarrow (((r1\_xxreal\_0\ np\_\_1\ X3) \wedge (r1\_xxreal\_0\ X3\ (k3\_finseq\_1\ X1))) \Rightarrow (k1\_funct\_1\ (k1\_finseq\_7\ X0\ X1\ X3\ X2)\ X3 = X2))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0) \wedge ((m1\_finseq\_1\ X1\ X0) \wedge ((v7\_ordinal1\ X2) \wedge (m1\_subset\_1\ X3\ X0)))) \Rightarrow (m2\_finseq\_1\ (k1\_finseq\_7\ X0\ X1\ X2\ X3)\ X0) \tag{5}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ X0)\Rightarrow$$
$$(\forall X2.(m1\_subset\_1\ X2\ X0)\Rightarrow(\forall X3.(v7\_ordinal1\ X3)\Rightarrow$$
$$(((r1\_xxreal\_0\ np\_\_1\ X3)\wedge(r1\_xxreal\_0\ X3\ (k3\_finseq\_1\ X1)))\Rightarrow$$
$$(k7\_partfun1\ X0\ (k1\_finseq\_7\ X0\ X1\ X3\ X2)\ X3 = X2)))))$$