t14_sppol_2 (TMJRuSFDriQrzxsho5kqnmpuvfRC6CBzyUB)

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Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\neg(X1 \in k3\_topreal1\ np\_\_2\ X0) \wedge (\forall X2.(m1\_subset\_1\ X2\ k5\_numbers) \Rightarrow (\neg(r1\_xxreal\_0\ np\_\_1\ X2) \wedge ((r1\_xxreal\_0\ (k2\_nat\_1\ X2\ np\_\_1)\ (k3\_finseq\_1\ X0)) \wedge (X1 \in k2\_topreal1\ np\_\_2\ X0\ X2))))))) \tag{1}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers) \wedge (v7\_ordinal1\ X1)) \Rightarrow (k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(m1\_subset\_1\ X1\ k5\_numbers))\Rightarrow (k1\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ X0)))\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow((((r1\_xxreal\_0\ np\_\_1\ X2)\wedge(r1\_xxreal\_0\ (k1\_nat\_1\ X2\ np\_\_1)\ (k3\_finseq\_1\ X1)))\Rightarrow(k2\_topreal1\ X0\ X1\ X2 = k1\_rltopsp1\ (k15\_euclid\ X0)\ (k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ X1\ X2)\ (k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ X0))\ X1\ (k1\_nat\_1\ X2\ np\_\_1))))\wedge((\neg(r1\_xxreal\_0\ np\_\_1\ X2)\wedge(r1\_xxreal\_0\ (k1\_nat\_1\ X2\ np\_\_1)\ (k3\_finseq\_1\ X1)))\Rightarrow(k2\_topreal1\ X0\ X1\ X2 = k1\_xboole\_0))))) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{8}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow(\neg(X1\in k3\_topreal1\ np\_\_2\ X0)\wedge(\forall X2.(m1\_subset\_1\ X2\ k5\_numbers)\Rightarrow(\neg(r1\_xxreal\_0\ np\_\_1\ X2)\wedge((r1\_xxreal\_0\ (k2\_nat\_1\ X2\ np\_\_1)\ (k3\_finseq\_1\ X0))\wedge(X1\in k1\_rltopsp1\ (k15\_euclid\ np\_\_2)\ (k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X0\ X2)\ (k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X0\ (k2\_nat\_1\ X2\ np\_\_1))))))))$$