t5_ftacell1 (TMSJ4DHqUJiEah6TvwCV7jNetPE7g6nsnt7)

October 27, 2020

Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14\_twoscomp : \iota$ be given. Let $k3\_msafree2 : \iota \Rightarrow \iota$ be given. Let $k1\_ftacell1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_twoscomp : \iota$ be given. Let $k9\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_circcomb : \iota \Rightarrow o$ be given. Let $v2\_circcomb : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $k2\_circcomb : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v3\_circcomb : \iota \Rightarrow o$ be given. Let $k10\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k14\_twoscomp \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((k12\_gfacirc1\ X0\ X1\ X2 \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k2\_twoscomp \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k2\_twoscomp \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k2\_twoscomp \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge(k9\_gfacirc1\ X0\ X1\ X2 \in k3\_msafree2\ (k13\_gfacirc1\ X0\ X1\ X2))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v1\_circcomb\ X0)\wedge((v2\_circcomb\ X0)\wedge(l1\_msualg\_1\ X0))))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v1\_circcomb\ X1)\wedge((v2\_circcomb\ X1)\wedge(l1\_msualg\_1\ X1))))\Rightarrow(\forall X2.(X2 \in k3\_msafree2\ X0)\Rightarrow((X2 \in k3\_msafree2\ (k2\_circcomb\ X0\ X1))\wedge(X2 \in k3\_msafree2\ (k2\_circcomb\ X1\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(\neg v2\_struct\_0\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((\neg v11\_struct\_0\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((v1\_msualg\_1\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((v1\_circcomb\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((v2\_circcomb\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge((v3\_circcomb\ (k13\_gfacirc1\ X0\ X1\ X2))\wedge(l1\_msualg\_1\ (k13\_gfacirc1\ X0\ X1\ X2))))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k1\_ftacell1\ X0\ X1\ X2\ X3\ X4 = k2\_circcomb\ (k13\_gfacirc1\ X0\ X1\ X2)\ (k13\_gfacirc1\ (k12\_gfacirc1\ X0\ X1\ X2)\ X4\ X3) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k13\_gfacirc1\ X0\ X1\ X2 = k2\_circcomb\ (k10\_gfacirc1\ X0\ X1\ X2)\ (k7\_gfacirc1\ X0\ X1\ X2) \tag{5}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k14\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k12\_gfacirc1\ X0\ X1\ X2 \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k9\_gfacirc1\ X0\ X1\ X2 \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ (k12\_gfacirc1\ X0\ X1\ X2)\ X4)\ k14\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k12\_gfacirc1\ (k12\_gfacirc1\ X0\ X1\ X2)\ X4\ X3 \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ (k12\_gfacirc1\ X0\ X1\ X2)\ X4)\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X4\ X3)\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X3\ (k12\_gfacirc1\ X0\ X1\ X2))\ k2\_twoscomp \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge(k9\_gfacirc1\ (k12\_gfacirc1\ X0\ X1\ X2)\ X4\ X3 \in k3\_msafree2\ (k1\_ftacell1\ X0\ X1\ X2\ X3\ X4)))))))))))$$