t34_ftacell1 (TMNeBeUBN-vjchSH4i8DpnSpGkXEvky2HCYL)

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Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k19\_ftacell1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. 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 $k48\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_twoscomp : \iota$ be given. Let $k45\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_circcomb : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k49\_gfacirc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k29\_twoscomp : \iota$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v1\_circcomb : \iota \Rightarrow o$ be given. Let $v2\_circcomb : \iota \Rightarrow o$ be given. Let $v3\_circcomb : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k6\_margrel1 : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_facirc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{gathered}\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_msualg\_1\ X0)) \Rightarrow (\forall X1. \\ ((\neg v2\_struct\_0\ X1) \wedge (l1\_msualg\_1\ X1)) \Rightarrow (\forall X2.(m1\_subset\_1 \\ X2\ (u1\_struct\_0\ X0)) \Rightarrow ((X2 \in u1\_struct\_0\ (k2\_circcomb\ X0\ X1)) \wedge (\\ X2 \in u1\_struct\_0\ (k2\_circcomb\ X1\ X0)))))\end{gathered} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X0 \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((X1 \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((X2 \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k14\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ (k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k14\_twoscomp)\ X2)\ k14\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k4\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k4\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k4\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge(k4\_tarski\ (k11\_finseq\_1\ (k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k4\_twoscomp)\ (k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k4\_twoscomp)\ (k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k4\_twoscomp))\ k29\_twoscomp \in u1\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2)))))))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(\neg v2\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((\neg v11\_struct\_0\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((v1\_msualg\_1\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((v1\_circcomb\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((v2\_circcomb\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge((v3\_circcomb\ (k49\_gfacirc1\ X0\ X1\ X2))\wedge(l1\_msualg\_1\ (k49\_gfacirc1\ X0\ X1\ X2))))))) \tag{4}$$

Assume the following.

$$(v1\_funct\_1\ k14\_twoscomp)\wedge((v1\_funct\_2\ k14\_twoscomp\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)\wedge(m1\_subset\_1\ k14\_twoscomp\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k48\_gfacirc1\ X0\ X1\ X2 = k9\_facirc\_1\ X0\ X1\ X2\ k14\_twoscomp \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k45\_gfacirc1\ X0\ X1\ X2 = k4\_tarski\ (k11\_finseq\_1\ (k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k4\_twoscomp)\ (k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k4\_twoscomp)\ (k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k4\_twoscomp))\ k29\_twoscomp \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k19\_ftacell1\ X0\ X1\ X2\ X3\ X4 = k2\_circcomb\ (k49\_gfacirc1\ X0\ X1\ X2)\ (k49\_gfacirc1\ (k48\_gfacirc1\ X0\ X1\ X2)\ X4\ X3) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X3)\wedge ((v1\_funct\_2\ X3\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)\wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_2\ np\_\_2\ k6\_margrel1)\ k6\_margrel1)))))\Rightarrow(k9\_facirc\_1\ X0\ X1\ X2\ X3 = k4\_tarski\ (k10\_finseq\_1\ (k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ X3)\ X2)\ X3) \tag{9}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(X0 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((X1 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((X2 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((X3 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((X4 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k14\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k48\_gfacirc1\ X0\ X1\ X2 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X1\ X2)\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X2\ X0)\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k45\_gfacirc1\ X0\ X1\ X2 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ (k48\_gfacirc1\ X0\ X1\ X2)\ X4)\ k14\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k48\_gfacirc1\ (k48\_gfacirc1\ X0\ X1\ X2)\ X4\ X3 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ (k48\_gfacirc1\ X0\ X1\ X2)\ X4)\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X4\ X3)\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge((k4\_tarski\ (k10\_finseq\_1\ X3\ (k48\_gfacirc1\ X0\ X1\ X2))\ k4\_twoscomp \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))\wedge(k45\_gfacirc1\ (k48\_gfacirc1\ X0\ X1\ X2)\ X4\ X3 \in u1\_struct\_0\ (k19\_ftacell1\ X0\ X1\ X2\ X3\ X4))))))))))))))))$$