t25_rlvect_x (TMXc7yEmDqRG4VSKyrb6Sgii9sS3d3FvsfD)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v5\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v6\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v7\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v8\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_rlvect\_x : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k4\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v5\_rlvect\_1\ X0) \wedge ((v6\_rlvect\_1\ X0) \wedge ((v7\_rlvect\_1\ X0) \wedge ((v8\_rlvect\_1\ X0) \wedge (l1\_rlvect\_1\ X0))))))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.\neg(X2 \in k2\_rlvect\_x\ X0\ X1) \wedge (\forall X3.(m2\_finseq\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m2\_finseq\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X5.((v1\_relat\_1\ X5) \wedge ((v5\_relat\_1\ X5\ k4\_numbers) \wedge ((v1\_funct\_1\ X5) \wedge (v1\_finseq\_1\ X5)))) \Rightarrow (\neg(X2 = k4\_rlvect\_1\ X0\ X4) \wedge ((r1\_tarski\ (k2\_relset\_1\ (u1\_struct\_0\ X0)\ X3)\ X1) \wedge ((k3\_finseq\_1\ X3 = k3\_finseq\_1\ X4) \wedge ((k3\_finseq\_1\ X3 = k3\_finseq\_1\ X5) \wedge (\forall X6.(v7\_ordinal1\ X6) \Rightarrow ((X6 \in k2\_finseq\_1\ (k3\_finseq\_1\ X3)) \Rightarrow (k7\_partfun1\ (u1\_struct\_0\ X0)\ X4\ X6 = k1\_rlvect\_1\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X3\ X6)\ (k1\_seq\_1\ X5\ X6)))))))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v5\_rlvect\_1\ X0)\wedge((v6\_rlvect\_1\ X0)\wedge((v7\_rlvect\_1\ X0)\wedge((v8\_rlvect\_1\ X0)\wedge(l1\_rlvect\_1\ X0))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m2\_finseq\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.((v1\_relat\_1\ X4)\wedge((v5\_relat\_1\ X4\ k4\_numbers)\wedge((v1\_funct\_1\ X4)\wedge(v1\_finseq\_1\ X4))))\Rightarrow(((r1\_tarski\ (k2\_relset\_1\ (u1\_struct\_0\ X0)\ X2)\ X1)\wedge((k3\_finseq\_1\ X2 = k3\_finseq\_1\ X3)\wedge((k3\_finseq\_1\ X2 = k3\_finseq\_1\ X4)\wedge(\forall X5.(v7\_ordinal1\ X5)\Rightarrow((X5 \in k2\_finseq\_1\ (k3\_finseq\_1\ X2))\Rightarrow(k7\_partfun1\ (u1\_struct\_0\ X0)\ X3\ X5 = k1\_rlvect\_1\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X2\ X5)\ (k1\_seq\_1\ X4\ X5)))))))\Rightarrow(k4\_rlvect\_1\ X0\ X3 \in k2\_rlvect\_x\ X0\ X1)))))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v5\_rlvect\_1\ X0)\wedge((v6\_rlvect\_1\ X0)\wedge((v7\_rlvect\_1\ X0)\wedge((v8\_rlvect\_1\ X0)\wedge(l1\_rlvect\_1\ X0))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(\forall X2.(X2 \in k2\_rlvect\_x\ X0\ X1)\Leftrightarrow(\exists X3.(m2\_finseq\_1\ X3\ (u1\_struct\_0\ X0))\wedge(\exists X4.(m2\_finseq\_1\ X4\ (u1\_struct\_0\ X0))\wedge(\exists X5.((v1\_relat\_1\ X5)\wedge((v5\_relat\_1\ X5\ k4\_numbers)\wedge((v1\_funct\_1\ X5)\wedge(v1\_finseq\_1\ X5))))\wedge((X2 = k4\_rlvect\_1\ X0\ X4)\wedge((r1\_tarski\ (k2\_relset\_1\ (u1\_struct\_0\ X0)\ X3)\ X1)\wedge((k3\_finseq\_1\ X3 = k3\_finseq\_1\ X4)\wedge((k3\_finseq\_1\ X3 = k3\_finseq\_1\ X5)\wedge(\forall X6.(v7\_ordinal1\ X6)\Rightarrow((X6 \in k2\_finseq\_1\ (k3\_finseq\_1\ X3))\Rightarrow(k7\_partfun1\ (u1\_struct\_0\ X0)\ X4\ X6 = k1\_rlvect\_1\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X3\ X6)\ (k1\_seq\_1\ X5\ X6))))))))))))$$