

t26_rlvect_x

(TMQS5oyzFNtyc3CyS6EswUGAGdgBUD5dthm)

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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 $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_rlvect_x : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ 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.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (\forall X1. (m2_finseq_1 X1 (u1_struct_0 X0)) \Rightarrow (k3_rlvect_x X0 X1 = ReplSep (toset (\lambda X2 : \iota. (v3_card_1 X2 (k3_finseq_1 X1)) \wedge (m2_finseq_1 X2 (u1_struct_0 X0)))) (\lambda X2 : \iota. \exists X3. ((v1_relat_1 X3) \wedge ((v5_relat_1 X3 k4_numbers) \wedge ((v1_funct_1 X3) \wedge ((v3_card_1 X3 (k3_finseq_1 X1)) \wedge (v1_finseq_1 X3)))))) \wedge (\forall X4. (v7_ordinal1 X4) \Rightarrow ((X4 \in k2_finseq_1 (k3_finseq_1 X1)) \Rightarrow (k7_partfun1 (u1_struct_0 X0) X0) X2 X4 = k1_rlvect_1 X0 (k7_partfun1 (u1_struct_0 X0) X1 X4) (k1_seq_1 X3 X4)))))) (\lambda X2 : \iota. k4_rlvect_1 X0 X2)))
 \end{aligned}
 \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow (\forall X1.(m2_finseq_1 X1 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X2.(X2 \in k3_rlvect_x X0 X1) \Leftrightarrow (\exists X3.((v3_card_1 X3 \\ & (k3_finseq_1 X1)) \wedge (m2_finseq_1 X3 (u1_struct_0 X0))) \wedge (\exists X4. \\ & ((v1_relat_1 X4) \wedge (v5_relat_1 X4 k4_numbers) \wedge (v1_funct_1 X4) \wedge \\ & ((v3_card_1 X4 (k3_finseq_1 X1)) \wedge (v1_finseq_1 X4)))))) \wedge ((X2 = \\ & k4_rlvect_1 X0 X3) \wedge (\forall X5.(v7_ordinal1 X5) \Rightarrow ((X5 \in k2_finseq_1 \\ & (k3_finseq_1 X1)) \Rightarrow (k7_partfun1 (u1_struct_0 X0) X3 X5 = k1_rlvect_1 \\ & X0 (k7_partfun1 (u1_struct_0 X0) X1 X5) (k1_seq_1 X4 X5))))))))) \end{aligned}$$