t20_msualg_6 (TMV3AQVw8NvAHdz7wLAg33RqVGefPYbDBLJ)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v4\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l3\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_msualg\_6 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $r1\_msualg\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_msualg\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u3\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((\neg v11\_struct\_0\ X0) \wedge (l1\_msualg\_1\ X0))) \Rightarrow (\forall X1.((v4\_msualg\_1\ X1\ X0) \wedge (l3\_msualg\_1\ X1\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (((r1\_rewrite1\ (k3\_msualg\_6\ X0)\ X2\ X3) \wedge (r1\_rewrite1\ (k3\_msualg\_6\ X0)\ X3\ X4)) \Rightarrow (\forall X5.(m2\_msualg\_6\ X5\ X0\ X1\ X2\ X3) \Rightarrow (\forall X6.(m2\_msualg\_6\ X6\ X0\ X1\ X3\ X4) \Rightarrow (m2\_msualg\_6\ (k1\_partfun1\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X2)\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X3)\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X3)\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X4)\ X5\ X6)\ X0\ X1\ X2\ X4)))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((\neg v11\_struct\_0\ X0) \wedge (l1\_msualg\_1\ X0))) \Rightarrow (\forall X1.((v4\_msualg\_1\ X1\ X0) \wedge (l3\_msualg\_1\ X1\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.((v1\_relat\_1\ X4) \wedge (v1\_funct\_1\ X4)) \Rightarrow ((r1\_msualg\_6\ X0\ X2\ X3\ X1\ X4) \Rightarrow ((r1\_rewrite1\ (k3\_msualg\_6\ X0)\ X2\ X3) \wedge (m2\_msualg\_6\ X4\ X0\ X1\ X2\ X3))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.$$
$$(((v1\_funct\_1\ X4)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1$$
$$X0\ X1))))\wedge((v1\_funct\_1\ X5)\wedge(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1$$
$$X2\ X3)))))\Rightarrow(k1\_partfun1\ X0\ X1\ X2\ X3\ X4\ X5 = k3\_relat\_1\ X4\ X5) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v2\_struct\_0$$
$$X0)\wedge((\neg v11\_struct\_0\ X0)\wedge(l1\_msualg\_1\ X0)))\wedge(((v4\_msualg\_1$$
$$X1\ X0)\wedge(l3\_msualg\_1\ X1\ X0))\wedge((m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\wedge$$
$$(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)))))\Rightarrow(\forall X4.(m2\_msualg\_6$$
$$X4\ X0\ X1\ X2\ X3)\Rightarrow((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ (k1\_funct\_1\ (u3\_msualg\_1$$
$$X0\ X1)\ X2)\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X3))\wedge(m1\_subset\_1\ X4$$
$$(k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X2)$$
$$(k1\_funct\_1\ (u3\_msualg\_1\ X0\ X1)\ X3)))))))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((\neg v11\_struct\_0\ X0)\wedge(l1\_msualg\_1$$
$$X0)))\Rightarrow(\forall X1.((v4\_msualg\_1\ X1\ X0)\wedge(l3\_msualg\_1\ X1\ X0))\Rightarrow$$
$$(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1$$
$$X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0$$
$$X0))\Rightarrow((r1\_rewrite1\ (k3\_msualg\_6\ X0)\ X3\ X4)\Rightarrow(\forall X5.((v1\_relat\_1$$
$$X5)\wedge(v1\_funct\_1\ X5))\Rightarrow((r1\_msualg\_6\ X0\ X2\ X3\ X1\ X5)\Rightarrow(\forall X6.$$
$$(m2\_msualg\_6\ X6\ X0\ X1\ X3\ X4)\Rightarrow(m2\_msualg\_6\ (k3\_relat\_1\ X5\ X6)\ X0\ X1$$
$$X2\ X4)))))))))$$