t44_jordan23 (TMYtsYQS8nUmvEBVEDTn1CErz2hPRCaPQDc)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_jordan23 : \iota \Rightarrow o$ be given. Let $v1\_topreal1 : \iota \Rightarrow o$ be given. Let $v2\_topreal1 : \iota \Rightarrow o$ be given. Let $v3\_topreal1 : \iota \Rightarrow o$ be given. Let $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v4\_topreal1 : \iota \Rightarrow o$ be given. Let $k4\_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \Rightarrow (((v1\_jordan23\ X0) \wedge ((v1\_topreal1\ X0) \wedge ((v2\_topreal1\ X0) \wedge ((v3\_topreal1\ X0) \wedge ((X1 \in k3\_topreal1\ np\_\_2\ X0) \wedge (X2 \in k3\_topreal1\ np\_\_2\ X0)))))) \Rightarrow ((k3\_finseq\_1\ X0 = np\_\_2) \vee ((X1 = X2) \vee ((X1 = k1\_funct\_1\ X0\ np\_\_1) \vee ((X2 = k1\_funct\_1\ X0\ np\_\_1) \vee (r1\_jordan3\ (k4\_jordan3\ X0\ X1\ X2)\ X1\ X2)))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge ((m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))) \Rightarrow (m2\_finseq\_1\ (k4\_jordan3\ X0\ X1\ X2)\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \tag{3}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow ((r1\_jordan3\ X0\ X1\ X2)\Leftrightarrow ((v4\_topreal1\ X0)\wedge ((k1\_funct\_1\ X0\ np\_\_1 = X1)\wedge (k1\_funct\_1\ X0\ (k3\_finseq\_1\ X0) = X2))))))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge (m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (((v1\_jordan23\ X0)\wedge ((v1\_topreal1\ X0)\wedge ((v2\_topreal1\ X0)\wedge ((v3\_topreal1\ X0)\wedge ((X1 \in k3\_topreal1\ np\_\_2\ X0)\wedge (X2 \in k3\_topreal1\ np\_\_2\ X0))))))\Rightarrow ((k3\_finseq\_1\ X0 = np\_\_2)\vee ((X1 = X2)\vee ((X1 = k1\_funct\_1\ X0\ np\_\_1)\vee ((X2 = k1\_funct\_1\ X0\ np\_\_1)\vee (v4\_topreal1\ (k4\_jordan3\ X0\ X1\ X2)))))))))$$