t29_bagorder (TMd4nkeFpHnz5ArmWgiBHJqTTu16E8xgAuY)

October 27, 2020

Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v2\_bagorder : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_bagorder : \iota \Rightarrow \iota$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15\_pre\_poly : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_2 : \iota \Rightarrow o$ be given. Let $v4\_relat\_2 : \iota \Rightarrow o$ be given. Let $v8\_relat\_2 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v4\_valued\_0 : \iota \Rightarrow o$ be given. Let $v2\_pre\_poly : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_pre\_poly : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r7\_relat\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_bagorder : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_bagorder : \iota \Rightarrow \iota$ be given. Let $k16\_pre\_poly : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.((v1\_partfun1\ X1\ (k15\_pre\_poly\ X0)) \wedge ((v1\_relat\_2\ X1) \wedge ((v4\_relat\_2\ X1) \wedge ((v8\_relat\_2\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (k15\_pre\_poly\ X0))))))) \Rightarrow (((\forall X2.((v1\_relat\_1\ X2) \wedge ((v4\_relat\_1\ X2\ X0) \wedge ((v1\_funct\_1\ X2) \wedge ((v1\_partfun1\ X2\ X0) \wedge ((v4\_valued\_0\ X2) \wedge (v2\_pre\_poly\ X2)))))) \Rightarrow (\forall X3.((v1\_relat\_1\ X3) \wedge ((v4\_relat\_1\ X3\ X0) \wedge ((v1\_funct\_1\ X3) \wedge ((v1\_partfun1\ X3\ X0) \wedge ((v4\_valued\_0\ X3) \wedge (v2\_pre\_poly\ X3)))))) \Rightarrow (\forall X4.((v1\_relat\_1\ X4) \wedge ((v4\_relat\_1\ X4\ X0) \wedge ((v1\_funct\_1\ X4) \wedge ((v1\_partfun1\ X4\ X0) \wedge ((v4\_valued\_0\ X4) \wedge (v2\_pre\_poly\ X4)))))) \Rightarrow ((k4\_tarski\ X2\ X3 \in X1) \Rightarrow (k4\_tarski\ (k11\_pre\_poly\ X0\ X2\ X4)\ (k11\_pre\_poly\ X0\ X3\ X4) \in X1))))) \wedge (r7\_relat\_2\ X1\ (k15\_pre\_poly\ X0))) \Rightarrow (v2\_bagorder\ (k5\_bagorder\ X0\ X1)\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow ((v1\_partfun1\ (k4\_bagorder\ X0)\ (k15\_pre\_poly\ X0)) \wedge ((v1\_relat\_2\ (k4\_bagorder\ X0)) \wedge ((v4\_relat\_2\ (k4\_bagorder\ X0)) \wedge ((v8\_relat\_2\ (k4\_bagorder\ X0)) \wedge (v2\_bagorder\ (k4\_bagorder\ X0)\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow((v1\_partfun1\ (k4\_bagorder\ X0)\ (k15\_pre\_poly\ X0))\wedge((v1\_relat\_2\ (k4\_bagorder\ X0))\wedge((v4\_relat\_2\ (k4\_bagorder\ X0))\wedge((v8\_relat\_2\ (k4\_bagorder\ X0))\wedge(m1\_subset\_1\ (k4\_bagorder\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (k15\_pre\_poly\ X0))))))))) \tag{3}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(k7\_bagorder\ X0 = k5\_bagorder\ X0\ (k4\_bagorder\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow(\forall X1.((v1\_partfun1\ X1\ (k15\_pre\_poly\ X0))\wedge((v1\_relat\_2\ X1)\wedge((v4\_relat\_2\ X1)\wedge((v8\_relat\_2\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (k15\_pre\_poly\ X0))))))))\Rightarrow((v2\_bagorder\ X1\ X0)\Leftrightarrow((r7\_relat\_2\ X1\ (k15\_pre\_poly\ X0))\wedge((\forall X2.((v1\_relat\_1\ X2)\wedge((v4\_relat\_1\ X2\ X0)\wedge((v1\_funct\_1\ X2)\wedge((v1\_partfun1\ X2\ X0)\wedge((v4\_valued\_0\ X2)\wedge(v2\_pre\_poly\ X2))))))\Rightarrow(k4\_tarski\ (k16\_pre\_poly\ X0)\ X2\in X1))\wedge(\forall X2.((v1\_relat\_1\ X2)\wedge((v4\_relat\_1\ X2\ X0)\wedge((v1\_funct\_1\ X2)\wedge((v1\_partfun1\ X2\ X0)\wedge((v4\_valued\_0\ X2)\wedge(v2\_pre\_poly\ X2))))))\Rightarrow(\forall X3.((v1\_relat\_1\ X3)\wedge((v4\_relat\_1\ X3\ X0)\wedge((v1\_funct\_1\ X3)\wedge((v1\_partfun1\ X3\ X0)\wedge((v4\_valued\_0\ X3)\wedge(v2\_pre\_poly\ X3))))))\Rightarrow(\forall X4.((v1\_relat\_1\ X4)\wedge((v4\_relat\_1\ X4\ X0)\wedge((v1\_funct\_1\ X4)\wedge((v1\_partfun1\ X4\ X0)\wedge((v4\_valued\_0\ X4)\wedge(v2\_pre\_poly\ X4))))))\Rightarrow((k4\_tarski\ X2\ X3\in X1)\Rightarrow(k4\_tarski\ (k11\_pre\_poly\ X0\ X2\ X4)\ (k11\_pre\_poly\ X0\ X3\ X4)\in X1))))))))) \tag{5}$$

Theorem 1 $\forall X0.(v3\_ordinal1\ X0)\Rightarrow(v2\_bagorder\ (k7\_bagorder\ X0)\ X0)$.