priority-select-tt^{0,22}

$\forall T$:Type, as:T List, f, g:($T \rightarrow \mathbb{B}$).
$T \subseteq \rho\ \mathbb{Z}$
$\Rightarrow$ sorted(as)
$\Rightarrow$ no_repeats(T;as)
$\Rightarrow$ (priority-select(f;g;as) = inl(true$_2$) $\in \mathbb{B}$+Unit
$\Leftrightarrow$
($\exists a \in as.\, f(a)$ & ($\forall b$:T. ($b \in as$) $\Rightarrow b < a \Rightarrow \neg g(b)$)))

http://www.cs.cornell.edu/Info/Projects/NuPrl/FDLcontent/p0_286125_/p24_132584_{priority-select-tt}.html