

## **inj\_into\_ocmon**<sup>13,42</sup>

$\forall g:\text{GrpSig}.$   
 $(\exists h:\text{OCMon}$   
   $\exists f:|g|\rightarrow|h|$   
     $(\text{IsMonHomInj}(g;h;f)$   
       $\& \text{RelsIso}(|g|;|h|;x,y.\uparrow(x =_b y);x,y.\uparrow(x =_b y);f)$   
       $\& \text{RelsIso}(|g|;|h|;x,y.\uparrow(x \leq_b y);x,y.\uparrow(x \leq_b y);f))$   
 $\Rightarrow (g \in \text{OCMon})$