Atomic layer deposition of Yttrium oxide using heteroleptic Y precursors.

Product	MP (°C)	TG Residue	VP (1 Torr, °C)	DSC (onset, °C)	Phase at RT
$Y(EtCp)_2(iPr\text{-}amd)$	5.7	1.2%	150	430.5	Liquid
$Y(iPrCp)_2(iPr\text{-}amd)$	-	2%	159	432	Liquid
$Y(EtCp)_3$	59.6	5.5%	200	466.8	Solid

Table1. Physical properties of $Y(RCp)_2$(iPr-amd), (R=Et, iPr) and $Y(EtCp)_3$

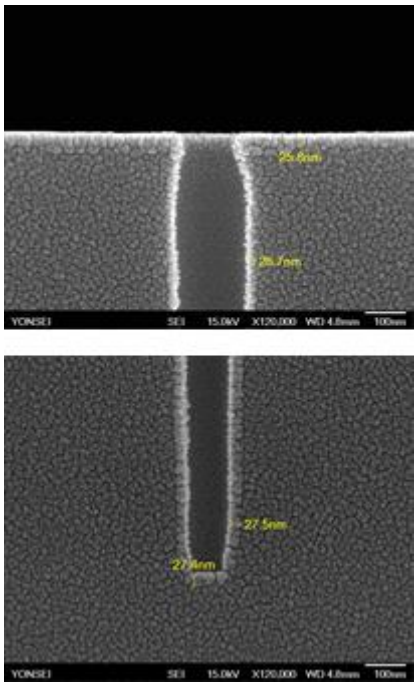

Fig. 1 Cross-sectional image of Y_2O_3 film using $Y(EtCp)_2$(iPr-amd) w/ oxygen at 400°C in 1:20 aspect ratio patterned wafer