

ABSTRACT

The invention provides a facile process for preparing various Group VI precursor compounds useful in the vapor deposition of such Group VI metals onto solid substrates, especially microelectronic semiconductor device substrates. The process provides an effective means to obtain such volatile materials, which can then be sources of molybdenum, chromium, or tungsten-containing materials to be deposited on such substrates. Additionally, the invention provides a method for vapor deposition of such compounds onto microelectronic device substrates.

Figure 1