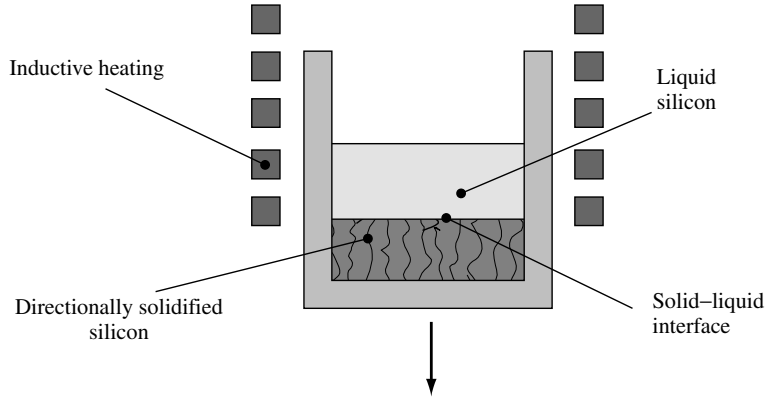

Figure 6.6 Conventional Bridgman technique that still is mainly used for the fabrication of multicrystalline ingots. Both melting and crystallisation of the silicon is performed in a Si_3N_4-coated quartz crucible. Crystallisation is realised by slowly moving downward the liquid silicon-containing crucible out of the inductively heated hot zone of the process chamber

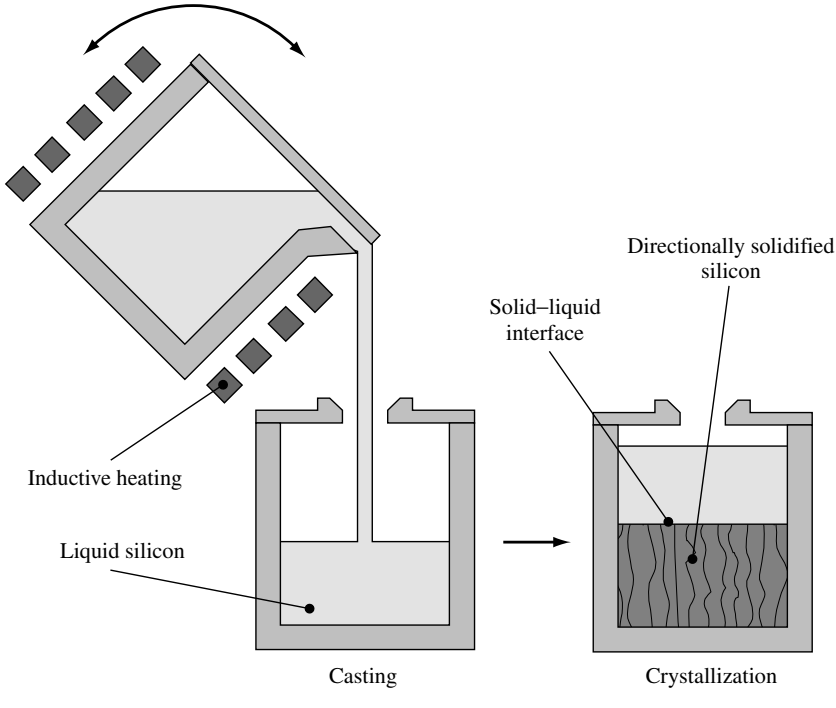

Figure 6.7 Block-casting process for the fabrication of multicrystalline silicon. After melting the silicon in a quartz pot, the silicon is poured into a second quartz crucible with a Si_3N_4 coating. The heating elements of the crystallisation crucible are not shown in the figure. In comparison with the Bridgman technique (see Figure 6.6), shorter crystallisation and cooling times can be realised by employing a more variable heater system