Figure Captions

Fig. 1. Energy diagram for the homogeneous ordering step in Cu_3Au.
U is the energy barrier to be overcome in taking a pair
of atoms from right to wrong sites; W is the resultant
change in internal energy of the alloy.

Fig. 2. Bridgman anvil and split gasket assembly used for the high
pressure measurements.

Fig. 3. Observed melting temperature of lead as a function of
indicated pressure in the Bridgman anvil device.

Fig. 4. Resistance of Cu_3Au wire during heating and subsequent
cooling through T_c at a pressure of 10.5 kbar.

Fig. 5. Observed dependence of the critical temperature for
ordering on the pressure.

Fig. 6. Resistance changes during anneal at 286°C and 1 kbar of
sample first equilibrated at 368°C. The curve is
calculated to give the best fit to the data points as
described in the text.

Fig. 7. Variation of the rate constant α with temperature at 900
bars. The slope of the straight line corresponds to an
activation energy of 1.9 ev.

Fig. 8. Variation of the rate constant α with pressure at 286°C.
The slope of the line corresponds to an activation volume
of 6.8 cm^3/mole of atoms.