

Energy Band Diagram of Diamond with Nitrogen and Boron centers

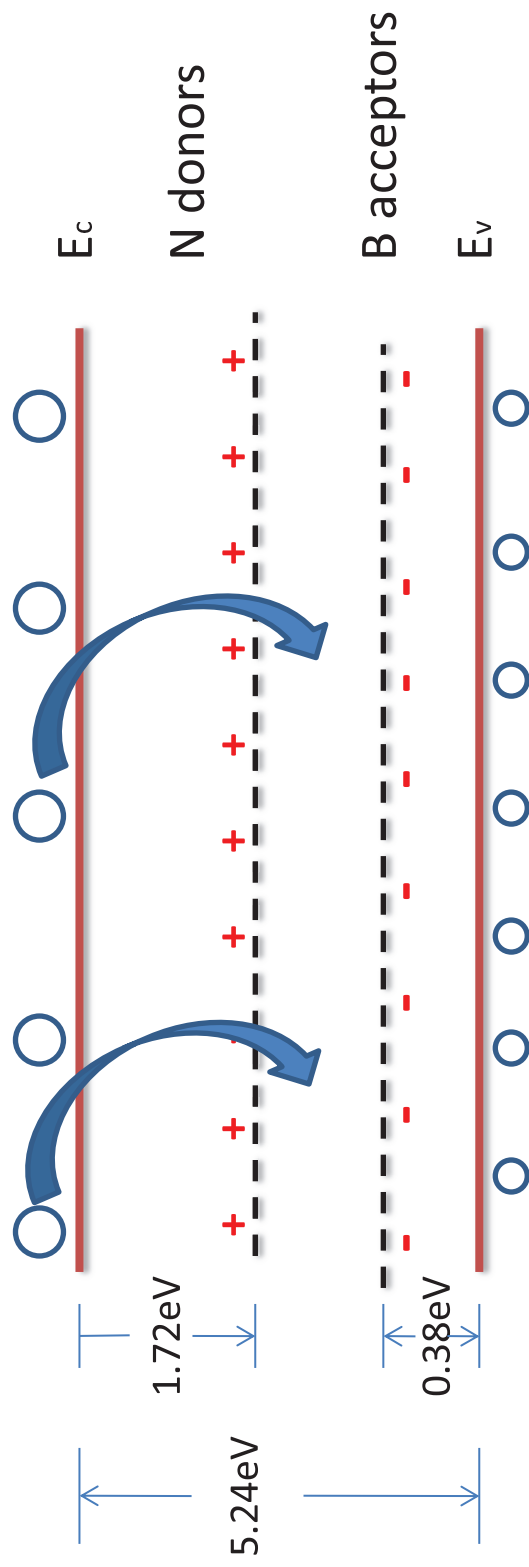


Figure 1

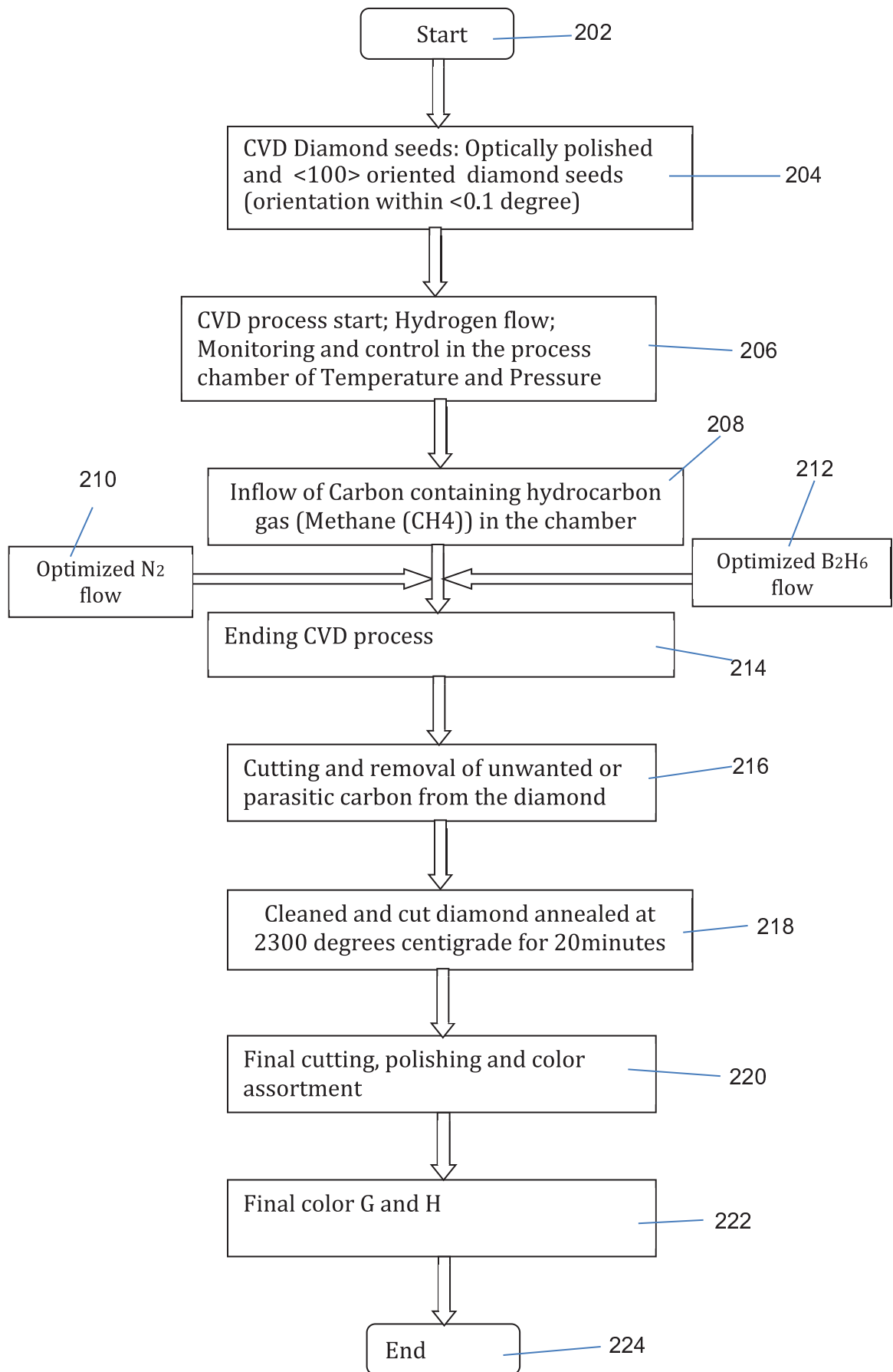


Figure 2

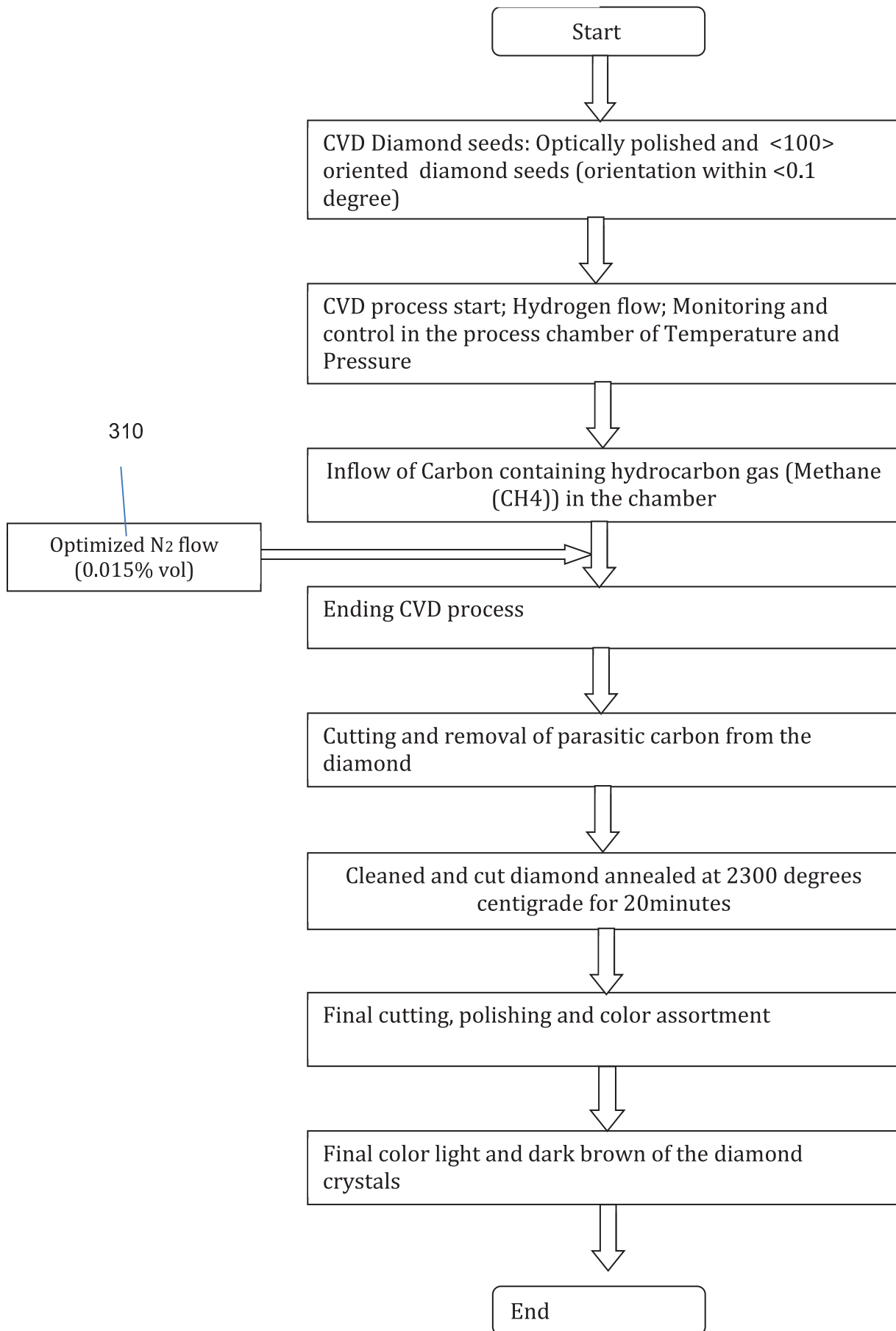


Figure 3

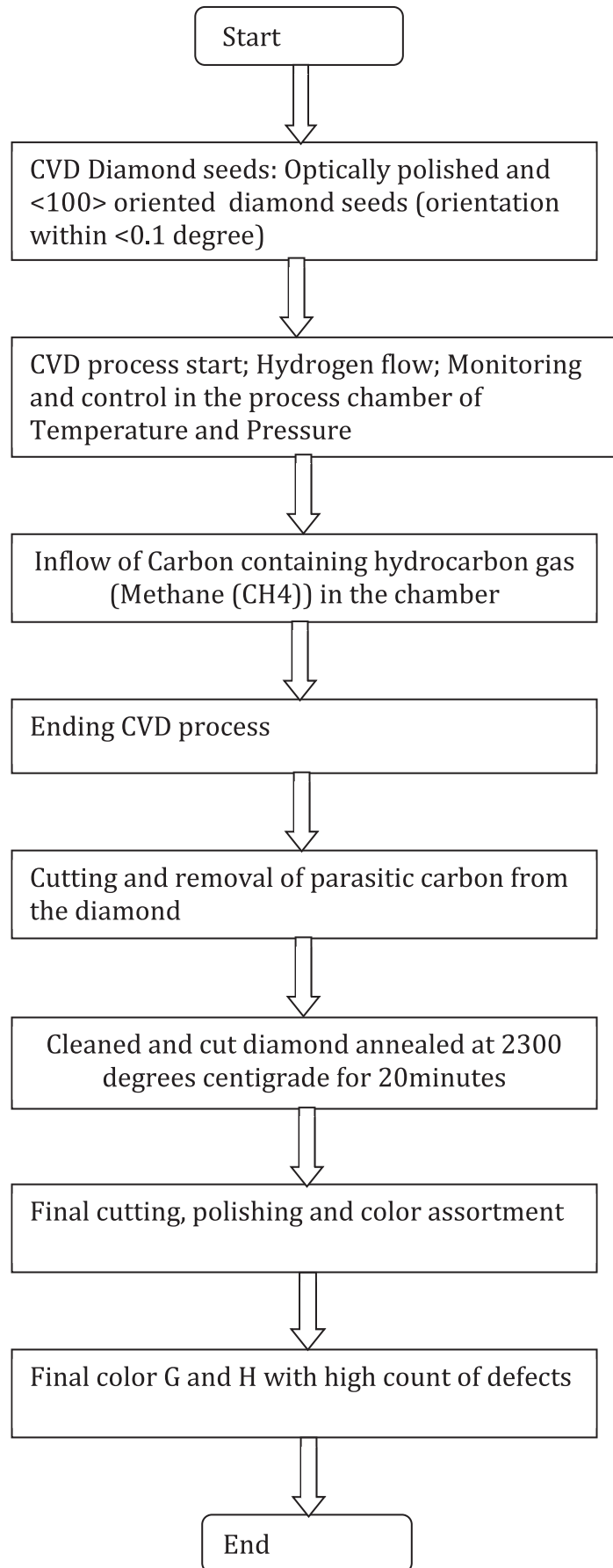


Figure 4

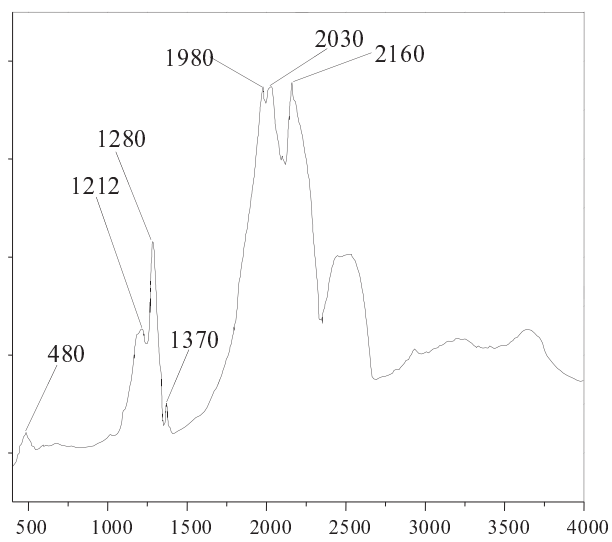


FIGURE 5:

FTIR SPECTRUM OF DIAMOND GROWN IN ACCORDANCE WITH AN EMBODIMENT OF THE INVENTION

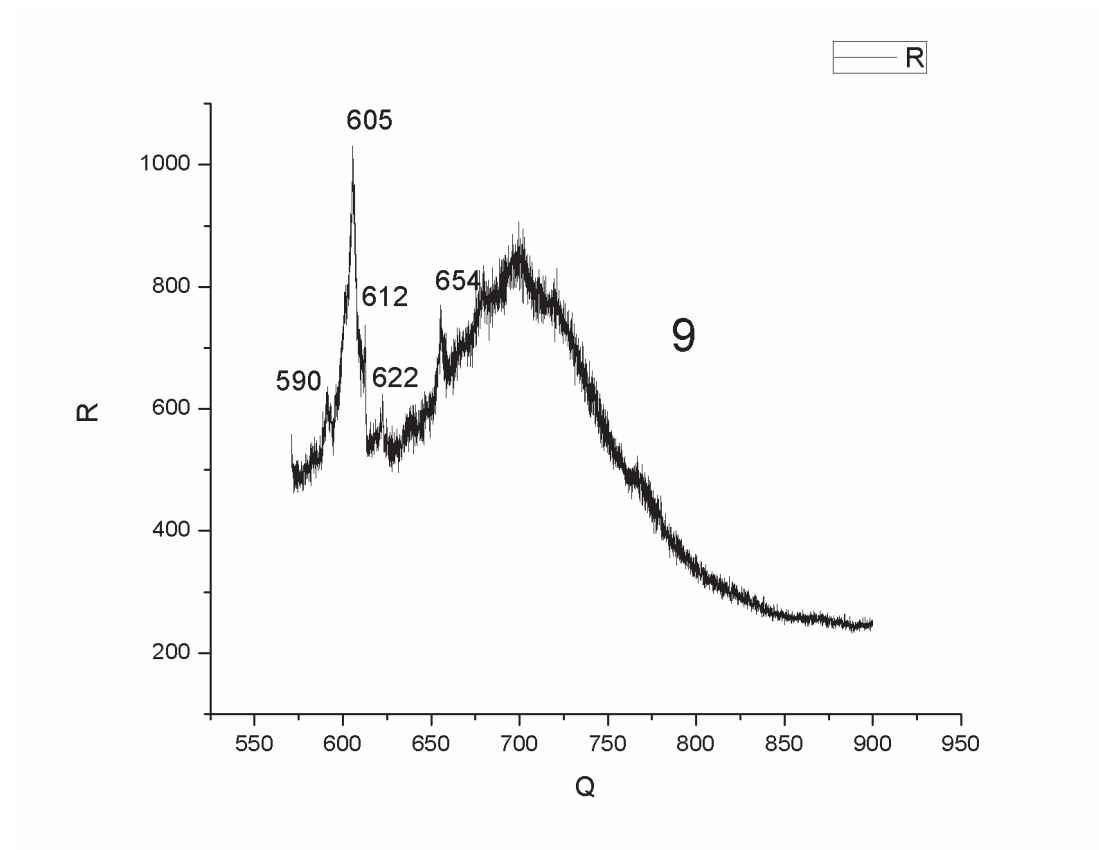


FIGURE 6:

PL spectrum of CVD diamond of prepared in accordance with an embodiment of the invention

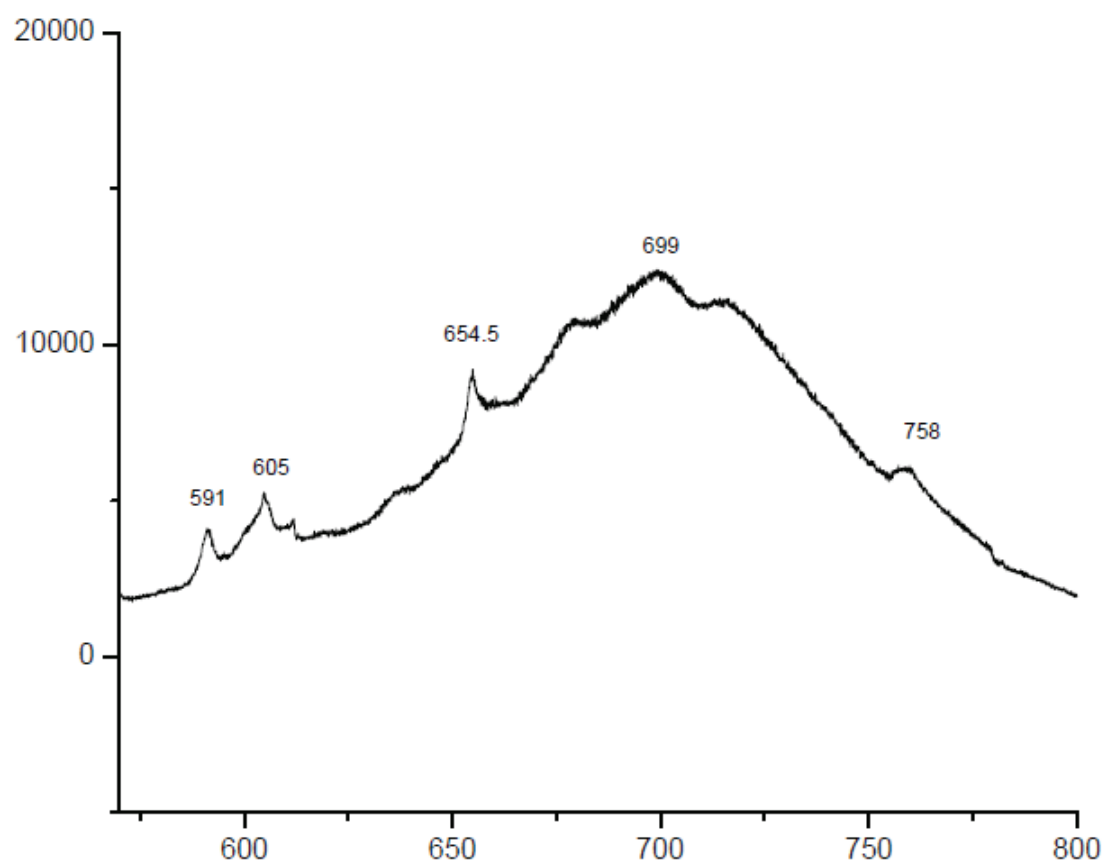


FIGURE 7:

PL SPECTRUM OF CVD DIAMOND PREPARED

PL Spectra of Diamond in Liquid Nitrogen

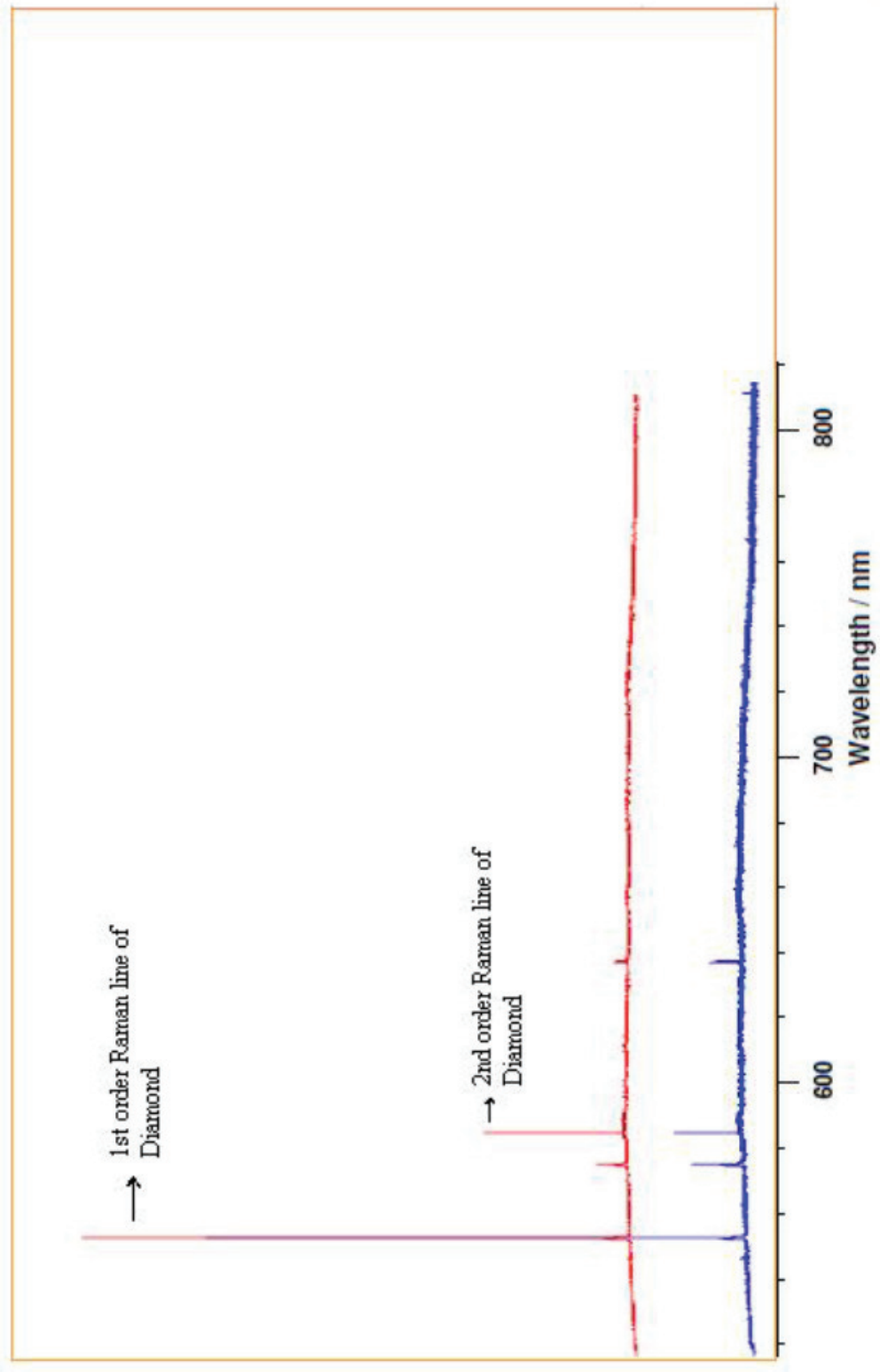


Figure 8



FIGURE 9:

CLEAN STEP GROWTH AS SEEN IN CVD DIAMOND GROWN IN ACCORDANCE WITH AN EMBODIMENT OF THE INVENTION

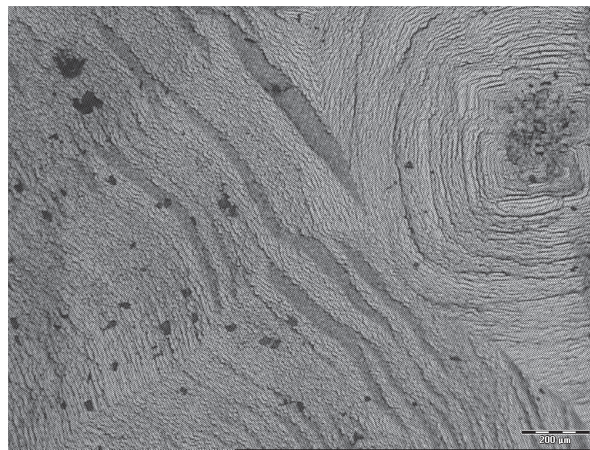


FIGURE 10:

THE STEPS AS SEEN IN THE DIAMOND GROWN BY CVD IN ACCORDANCE WITH THE AN EMBODIMENT OF THE INVENTION