WHAT IS CLAIMED IS:

1. A method of forming a complex form in a workpiece comprising:

moving a grinding tool having a complex shape along a first pathway relative to a first portion of a side surface of a rough slot in a workpiece, wherein the grinding tool is tilted at a first angle in a lateral plane relative to the workpiece;

changing the angle of the grinding tool relative to the workpiece; and

moving the same grinding tool along a second pathway different from the first pathway to contact a second portion of the side surface of the rough slot opposite the first portion of the side surface of the rough slot, wherein the same grinding tool is tilted at a second angle in a lateral plane relative to the workpiece while moving along a second pathway.

2. A method of claim 1, wherein a bottom surface of the workpiece is formed to have a substantially convex curvature.

3. The method of any one of claims 1 and 2, further comprising forming a rough slot in the workpiece.

4. The method of claim 2, further comprising forming a rough slot in the workpiece prior to moving the grinding tool.

5. The method of claim 2, wherein forming a rough slot comprises rotating a grinding wheel having a generally annular shape against a portion of the workpiece to form the rough slot.

6. The method of claim 2, wherein the rough slot comprises a generally rectangular cross-sectional shape as viewed in a lateral plane of the workpiece.

7. The method of claim 2, wherein the substantially convex curvature defines at least a portion of the bottom surface having a raised portion.

8. The method of claim 2, wherein the substantially convex curvature defines at least a portion of a bottom surface of the complex shape opening.

9. The method of any one of claims 1 and 2, wherein the grinding tool comprises a grinding quill tool.

10. The method of claim 1, wherein the first angle and the second angle are sufficient to space a bottom surface of the grinding tool from a bottom surface of the workpiece.

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11. The method of claim 10, wherein the the first angle and the second angle isnot greater than about 10 degrees.