The Appeals conference in the above-referenced matter was held by Senior Staff Counsel James E. Mahler on September 19, 1995, in San Jose, California.

**Protested Item**

The protested tax liability for the period July 1, 1989, through June 30, 1991, net of revised audit adjustments, is measured by:

<table>
<thead>
<tr>
<th>Item</th>
<th>State, Local, and County</th>
<th>Transit</th>
<th>EQRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable sales of drill-align panels</td>
<td>$183,058</td>
<td>$95,245</td>
<td>$98,818</td>
</tr>
</tbody>
</table>

**Petitioner's Contentions**
1. Petitioner is a service enterprise and has never produced a finished product or component.

2. If the transactions at issue were sales of tangible personal property, the sales were for resale.

**Summary**

Petitioner manufactures multi-layer, laminated circuit boards to the special order of its customers. We understand that the circuit boards are unfinished when petitioner transfers them to its customers -- the customers finish the boards and then install them in electronics equipment for sale. According to petitioner, it is the only company in the world which makes laminated circuit boards.

Petitioner pays tax reimbursement to suppliers for property consumed in the manufacturing process, and issues resale certificates for property physically incorporated into the circuit boards. It bills its customers separately stated charges for the boards, plus charges for programming, film work and drill-align panels.

Claimed sales for resale of the circuit boards were supported by resale certificates. However, the auditor asserted tax on the charges for programming, film work and drill-align panels. The auditor found that those items were tooling which petitioner had used to manufacture the circuit boards and which petitioner had also sold to its customers. The auditor found that the resale certificates did not cover the sales of tooling because they did not explicitly mention tooling. Petitioner subsequently solicited and received XYZ letters from customers indicating that they had purchased the drill-align panels for resale, but the auditor rejected the letters on the ground that petitioner had used the tooling in the manufacturing process prior to any resale by the customer.

A revised audit subsequently deleted the charges for programming and film work from the measure of tax. The audit supervisor found that the programming was nontaxable custom programming used to run petitioner’s equipment, and that title in the programming and the film work did not pass to petitioner’s customers. The only remaining issue is whether tax applies to the charges for drill-align panels (also called “etched panels”).

The purchase orders which petitioner received from its customers usually specified a certain number of circuit boards “plus one”. The “plus one” referred to the drill-align panel. Neither the purchase orders nor any other documents mentioned title in the drill-align panels. In concluding that petitioner had sold the drill-align panels to its customers prior to use in the manufacturing process, the audit staff relied on Sales and Use Tax General Bulletin 50-24 (July 10, 1950), which reads:
“When manufacturers purchase, or fabricate from raw materials purchased, dies, patterns, jigs, tooling, photo engravings, and other manufacturing or printing aids for the account of customers who acquire title to the property upon delivery thereof to, or upon the completion of the fabrication thereof by, the manufacturers, the manufacturers will be regarded as purchasing such property either as agent for, or for resale to, their customers. The tax will apply, accordingly, with respect either to the sale to the manufacturer as agent of his customer, or with respect to the sale by the manufacturer to the customer, and not also with respect to the sale to the manufacturer.

“In determining whether the manufacturer or printer purchases the property on behalf of, or for resale to, his customer, the terms of the contract with the customer, the custom or usage of the trade and any other pertinent factors will be considered. For example, if the customer issues a purchase order for a pattern, die, or other tool, or on the purchase order for the goods itemizes or otherwise specifies the particular pattern, die, or tool which will be required by the manufacturer or printer to manufacture the goods desired by the customer, and the manufacturer obtains such tool pursuant to the customer's specific order, billing, itemizing, or otherwise identifying it to the customer separately from the billing for the article manufactured therefrom, and either delivers it to the customer or holds it as bailee for the customer, it will be presumed that the manufacturer acquired the property on behalf of the customer or for immediate resale to him.”

At the Appeals conference, petitioner’s representatives explained that the drill-align panel is not a tool used in the manufacturing process, but simply one of the circuit boards produced to the customer’s order. According to petitioner’s representatives, since the circuit boards it makes are laminated, holes must be drilled in them so that circuits on each layer can be connected by lines of copper to circuits on the other layers. Each hole must be drilled to within .001 inch for a proper connection.

Sometimes petitioner does the drilling, or sometimes the customer does it. If petitioner does the drilling, it takes the first circuit board off the production line, places it in a drill and drills the holes. The board is also “etched”, that is, the copper covering is removed to allow visual inspection of the interior to verify that the holes were drilled correctly. This is the so-called “drill-align board” or “etched panel”. If this first board was drilled correctly, the remaining boards are drilled and all the boards, including the drill-align board, are then transferred to the customer. Petitioner bills a separate charge for the drill-align panel so that the customer will have a better idea of how its costs were allocated.

If the customer has elected to drill its own boards, petitioner does not prepare or bill for a drill-align panel. However, petitioner may still etch one of the boards so that the customer can inspect the interior and verify that the boards were manufactured to specification.
Analysis and Conclusions

The staff’s position is that the drill-align panels are used in the process of making the printed circuit boards. This position is based on the fact that the drill-align panels are separately mentioned in the customers’ purchase orders and separately priced on petitioner’s invoices, just as tooling is often separately ordered and billed. However, testimony at the Appeals conference indicates that a drill-align panel is simply one of the circuit boards manufactured to the customer’s order. It happens to be the first board drilled, and is therefore inspected carefully to see that the drill was aligned properly, but it is not otherwise used in the manufacturing process.

Petitioner has resale certificates for its sales of circuit boards, as well as XYZ letters specifically for the drill-align panels. We find that the drill-align panels were sold under resale certificates, and were not used prior to sale. Petitioner is therefore not liable for tax on the charges in question.

Recommendation

Cancel the determination.

James E. Mahler, Senior Staff Counsel

January 4, 1995

Date