Searching for a Specific High-Level Event

Sometimes you do not want to accept the next available high-level event pending for your application. Instead, you might want to select one such event from among all the high-level events in your application's high-level event queue. For example, you might want to look for a return receipt for a high-level event you previously posted before processing other high-level events.

You can select a specific high-level event by calling the function **GetSpecificHighLevelEvent**. One of the parameters you pass to this function is a filter function that you provide. Your filter function should examine an event in your application's high-level event queue and determine if that *message* is the kind of event you wish to receive. If it is, your filter function returns TRUE. This indicates that your filter function does not want to inspect any more events. If the filter function finds an event of the desired type, it should call **AcceptHighLevelEvent** to retrieve it. When your function returns TRUE, the function **GetSpecificHighLevelEvent** itself returns TRUE.

If your filter function returns FALSE for an event in the high-level event queue, then **GetSpecificHighLevelEvent** looks at the next event in the high-level event queue and executes your filter function. If the filter function returns FALSE for all the high-level events in the queue, then **GetSpecificHighLevelEvent** itself returns FALSE to your application.

Here's how you declare the filter function whose address you pass to **GetSpecificHighLevelEvent**:

```
pascal Boolean aFilter (void *  yourDataPtr,
                        HighLevelEventMsgPtr  msgBuff,
                        const TargetID *sender)
```

The yourDataPtr parameter indicates the criteria your function should use to search for a specific event. The *msgBuff* parameter contains a pointer to a high-level event *message* record that has the HighLevelEventMsg structure.

When you call **GetSpecificHighLevelEvent** and it executes your filter function for a high-level event waiting in the high-level event queue, the fields of HighLevelEventMsg are filled in by the **Event Manager**. You can then compare the fields of this record to the information you pass in the yourDataPtr parameter to determine if that event suits your needs. For example, the yourDataPtr parameter might contain the signature of a return receipt. You can test its value against the EventClass contained in the theMsgEvent field of the high-level event *message* record.