TABLE 2-continued

```
        </dependentAssembly>
    </dependency>
    <!-- Privatized assembly -->
    <file name="mypaint.dll">
            <comClass description="Font Property Page"
clsid="{0BE35200-8F91-11CE-9DE3-00AA004BB851}"/>
            <comClass description="Color Property Page"
clsid="{0BE35201-8F91-11CE-9DE3-00AA004BB851}"/>
            <comClass description="Picture Property Page"
clsid="{0BE35202-8F91-11CE-9DE3-00AA004BB851}"/>
        </file>
        <file name="mydraw.dll"/>
        <file name="testctl32.dll">
            <windowClass>ToolbarWindow32</windowClass>
            <windowClass>ComboBoxEx32</windowClass>
            <windowClass>testctls_trackbar32</windowClass>
            <windowClass>testctls_updown32</windowClass>
            <windowClass>testctls_progress32</windowClass>
        </file>
        <file
            name="new\SxS_COM.dll">
            <comClass
                description="SxSTestObject Class"
                clsid="{F3B09421-5A10-4756-9BAF-7A447E07D3C2}"
                threadingModel="Apartment"
                tlbid="{B21101B9-90DF-4841-BEAC-41F68CD94BDC}"
                progid="SxS_COM.SxS_COMObject.1">
                <progid>"SxS_COM.SxS_COMObject"</progid>
                </comClass>
            <interface
                iid="{D8C178A3-F275-4EAB-B6F4-896B5B9A0FC0}"
                name="ISxSTestObject"
                proxystubclsid="{00020424-0000-0000-C000-
000000000046}"
                proxystubclsid32="{00020424-0000-0000-C000-
000000000046}"
                tlbid="{B21101B9-90DF-4841-BEAC-41F68CD94BDC}"/>
            <typelib
                tlbid="{B21101B9-90DF-4841-BEAC-41F68CD94BDC}"
                version="1.0"
                description="SxS_COM 1.0 Type Library"
                helpdir="new"/>
        </file>
    </assembly>
```

[0045] Assemblies may be dependent on other assemblies, which in turn are dependent on other assemblies, and so on. To ensure the proper versions of dependent assemblies, one or more of the assemblies (e.g., assembly $\mathbf{208}_1$) each have an assembly manifest (e.g., $\mathbf{214}_1$) associated therewith that specifies its corresponding assembly's dependencies. To this end, assembly authors that create a side-by-side assembly may also author an assembly manifest, which is copied to the assembly cache **212** with the corresponding assembly at the time of installation, whereby that assembly manifest will be interpreted for proper version dependencies. Note that although not directly identified in **FIG. 2**A, it is understood that assemblies×$\mathbf{208}_2$-$\mathbf{208}_4$ and any other assemblies in the assembly cache **212** each may have an assembly manifest associated therewith, (shown in **FIG. 2A** as a set **215** of other assembly manifests).

[0046] Each assembly manifest describes the assembly and includes information about its individual assemblies, including, for example, the name and version of the assembly, the items (program files, resources) that make up the assembly, and the binding path to items within the assembly (e.g., for Win32 DLLs this is the location of the DLL relative to the root of the assembly, whereas for COM Servers this is the CLSID (class identifier), ProgID (programmatic identifier) and other COM metadata). The assembly manifest may also include any dependencies on other assemblies, object classes and global names.

[0047] A sample assembly manifest is set forth in TABLE3 below:

TABLE 3

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<assembly xmlns="urn:schemas-microsoft-com:asm.v1"
manifestVersion="1.0">
    <assemblyIdentity type="win32"
name="Microsoft.Tools.VisualCPlusPlus.Runtime-Libraries"
version="6.0.0.0" processorArchitecture="x86"
publicKeyToken="6595b64144ccf1df"/>
    <file name="mfc42u.dll"
hash="3eab067f82504bf271ed38112a4ccdf46094eb5a"
hashalg="SHA1">
        <comClass description="Font Property Page"
clsid="{0BE35200-8F91-11CE-9DE3-00AA004BB851}"/>
        <comClass description="Color Property Page"
clsid="{0BE35201-8F91-11CE-9DE3-00AA004BB851}"/>
        <comClass description="Picture Property Page"
clsid="{0BE35202-8F91-11CE-9DE3-00AA004BB851}"/>
    </file>
    <file name="mfc42.dll"
```