



**Figure 15-6** Requirements specification and sales product.

## 15.2.2 A Data Model for Requirement and Requirement Specification

Figure 15-6 shows the data model for **requirement**, **requirement\_specification**, and **sales\_product**. I have left out some subtype/supertype relationships and some intervening entity types in the subtype/supertype network.

A **plan** is a **possible\_world** that some **party** would like to bring about.

A **requirement** is a **spatio\_temporal\_extent** that is *part\_of\_plan* of at least one **plan** and is *defined\_by* exactly one **requirement\_specification**, where the *part\_of\_plan* relationship type is a subtype of the *part\_of* relationship type and the *defined\_by* relationship type is a subtype of the *member\_of* relationship type.

A **requirement\_specification** is a **class\_of\_functional\_object** that is the set of possible **functional\_objects** that meet the specification.

## 15.2.3 Requirement Specifications

In the preceding overview, I said that there was a **requirement\_specification** that any possible **functional\_object** that met the specification was a member of, but that did not say much about what the specification was. I will cover this here.

A specification is a collection of individual elements, each of which is a class that each object that meets the specification is a member of. So the specification itself is the intersection of these