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Patently Enabled December 2025 – How Broadly Can I Claim? Genus-Species Assessments and Why They Matter

Key Takeaways

- If the prior art covers narrow, specific topics within a broader category, focus on carving out what's still new—distinct species, tighter sub-genera, or structural features that meaningfully set your invention apart.
- If the prior art covers a broad category, highlight what makes your specific species stand out, especially if it delivers better or unexpected performance.
- If your invention includes many variants, lead with the species that matters most commercially while making sure your disclosure can later support a well-crafted broader genus claim.

When drafting claims, inventors face a recurring challenge: How broad can a patent claim be without being swallowed by prior art? Maximizing claim breadth is often a top priority as it defines the extent to which one can exclude others from a technical and commercial space. Calibrating claim breadth often turns on the relationship between a genus (a broad category of things) and species (a specific thing within that class). Understanding genus-species relationships is essential, as they guide claim scope and prevent overly narrow protection.[1]

Consider a biotechnology company developing a class of antiviral molecules (genus) containing many possible structural variants (species). The company claims the entire genus, but the examiner identifies prior art that names one of those structural variants. Unfortunately, the company's claim strategy falters: **A species anticipates a genus**. If prior art identifies a species within the applicant's claimed genus, then the genus claim lacks novelty.[2] An applicant may argue that the prior art only mentioned a species in passing or among dozens of similar compounds, but the law is clear: When the species is specifically named, the breadth of the disclosure does not dilute its anticipatory power. Even if a reference lists 10,000 compounds, each named compound is deemed "described."[3] From the USPTO's perspective, once the species is disclosed, its genus is in the public domain and cannot be recaptured through broad claiming.

While a species always belongs to a genus, the converse is not always true. **Disclosure of a genus *can* anticipate a claimed species where the species is "at once envisaged."**[4] The relevant question is this: Would an expert in the field immediately recognize the species as one of a limited set of possible combinations? For example, if a reference discloses a chemical scaffold with only a handful of permitted substituents at limited positions, producing a small, well-defined set of compounds, then each member is treated as if the reference had named it explicitly.

But such "at once envisaged" circumstances are limited, and **not all genera anticipate a species**.[5] When a reference presents a vast or open-ended genus (e.g., an "alkaline solution" encompassing innumerable species) or permits infinite combinations, anticipation will not be found. In such cases, the species has not been "at once envisaged" and the prior art is simply too broad to deprive the species of novelty. When an invention resides within a known genus, the drafting challenge is to distinguish the inventive species from known species so that it qualifies as a nonobvious species or sub-genus eligible for independent protection.

Understanding genus-species distinctions helps applicants refine claim strategy. If prior art names a species, applicants can claim novel species, sub-genera, or distinguishing structural features while prioritizing key commercial variants and preserving support for future genus claims. If the prior art discloses a genus, the focus should shift to species claims backed by evidence of improved or unexpected performance.

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[1] *See In re Slayter*, 276 F.2d 408 (C.C.P.A. 1960); see also In re Gosteli, 872 F.2d 1008 (Fed. Cir. 1989).
[2] *Ex parte A*, 17 U.S.P.Q.2d (BNA) 1716, 1718 (B.P.A.I. 1990) (holding that a claimed compound was anticipated where it was specifically named in a reference listing many compounds and explaining that "the tenth edition of the Merck Index lists ten thousand compounds. In our view, each and every one of those compounds is 'described' as that term is used in 35 U.S.C. § 102(a), in that publication").
[3] *In re Petering*, 301 F.2d 676, 133 U.S.P.Q. (BNA) 275 (C.C.P.A. 1962); Kennametal, Inc. v. Ingersoll Cutting Tool Co., 780 F.3d 1376, 114 U.S.P.Q.2d (BNA) 1250 (Fed. Cir. 2015); In re Schauman, 572 F.2d 312, 197 U.S.P.Q. (BNA) 5 (C.C.P.A. 1978).
[4] *In re Meyer*, 599 F.2d 1026, 202 U.S.P.Q. (BNA) 175 (C.C.P.A. 1979).
[5] *See Takeda Chem. Indus., Ltd. v. Mylan Labs.*, Inc., 549 F.3d 1381 (Fed. Cir. 2008).

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