Volume 22: Three Carbon–Heteroatom Bonds: Thio-, Seleno-, and Tellurocarboxylic Acids and Derivatives; Imidic Acids and Derivatives; Ortho Acid Derivatives

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N. Nakajima and M. Ubukata
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N. Nakajima and M. Ubukata

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Product Subclass 5: Thioimidates and Their Derivatives
N. Nakajima and M. Ubukata

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### 22.7.5.1 Synthesis of Product Subclass 5

- Method 1: Dimerization of Tellurocarbonyl Fluorides
- Method 2: Halogen Exchange of 2,4-Difluoro-2,4-bis(perfluoroalkyl)-1,3-ditelluretanes
- Method 3: Preparation of Tris(aryltellanyl)carbenium Ions

22.7.6 **Product Subclass 6: Ortho Amides (Alkane-1,1,1-triamines)**

W. Kantlehner

### 22.7.6.1 Synthesis of Product Subclass 6

- Method 1: Substitution of Cyano Groups
- Method 2: Substitution of Halogens
- Method 3: Substitution of Amine Derivatives
- Method 4: Substitution of Alkoxy Groups
- Method 5: Substitution of Alkylsulfanyl Groups
- Method 6: Reaction of Guanidinium Salts
- Method 7: Reaction of Pyrimidinium Salts with Amines
- Method 8: Reaction of Tetrazolium Salts with Ammonia
- Method 9: Reaction of Isocyranates
- Method 10: Reaction of Tetraaminoethenes with NH-Acidic Compounds
- Method 11: Reaction of Azoalkenes with CH₂-Acidic Compounds
- Method 12: Modification of Existing Ortho Amides
- Method 13: Cycloaddition Reactions
- Method 14: Other Methods
22.7.7 Product Subclass 7: Tris(diorganophosphino)methanes and Derivatives

W. Kantlehner

22.7.7 Synthesis of Product Subclass 7

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